

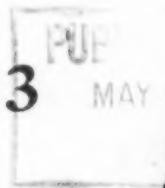
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AMERICAN BEE JOURNAL

May



1943



May, 1943

AMERICAN BEE JOURNAL

Vol. LXXXIII, No. 5

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Editors: G. H. Cale, Frank C. Pellett, M. G. Dadant, J. C. Dadant

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but some DON'T smile

THE smiling face of a child getting a good lunch at school—That picture is duplicated daily in thousands of communities throughout America—in communities which have organized school lunch programs.

BUT not all communities have school lunch programs. In those schools some of the children don't smile when noon rolls 'round. Poverty, parents busy in war jobs or ignorant about diet, any one of several reasons prevent some children from getting a good lunch or any lunch at all.

PROPER nutrition for our children is essential to the strength of America. You can help build that strength by stamping out hidden hunger—the enemy on the home front. Organize a community school lunch program in your community now through your Parent-Teachers association, your civic organization, your fraternal order, or other public spirited group.

*This advertisement
sponsored by* **American Honey Institute**
Madison, Wisconsin

in the interest of our country's future

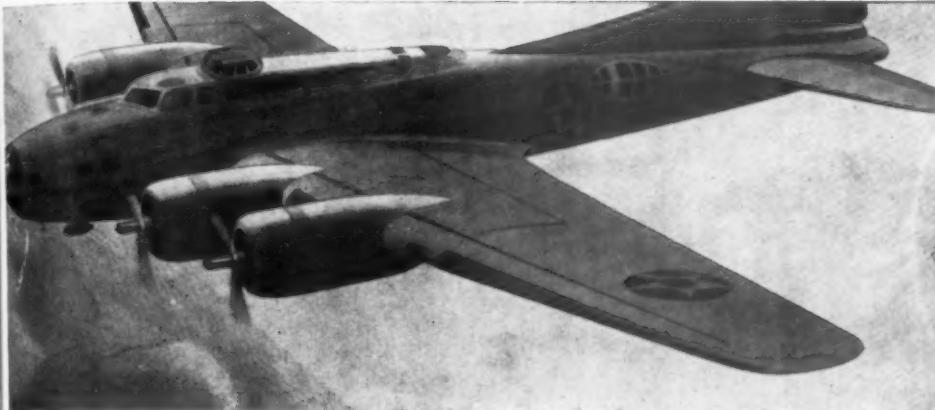
THE FOOD DISTRIBUTION ADMINISTRATION OF THE U. S. DEPARTMENT OF AGRICULTURE HELPS COMMUNITIES OPERATE SCHOOL LUNCH PROGRAMS. WRITE FOR INFORMATION.

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Wax the Wings of Victory

—J. M. HITCHINGS, Davenport, Iowa

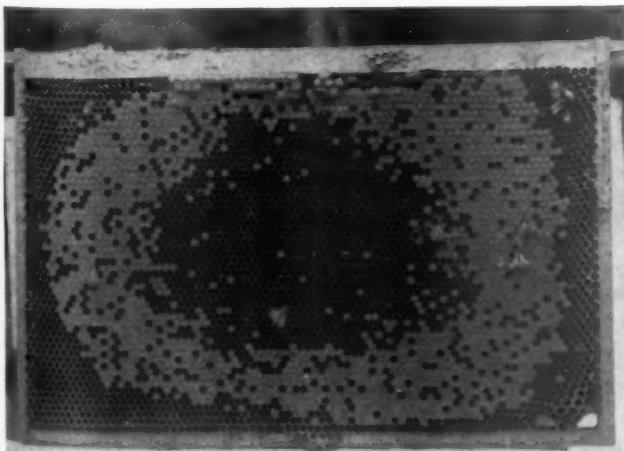


You couldn't have said it better, Mr. Hitchings. And lest you who read may think all this talk about beeswax in war is more or less ballyhoo, listen to Harry R. O'Brien, in the *Country Gentlemen* for last July."

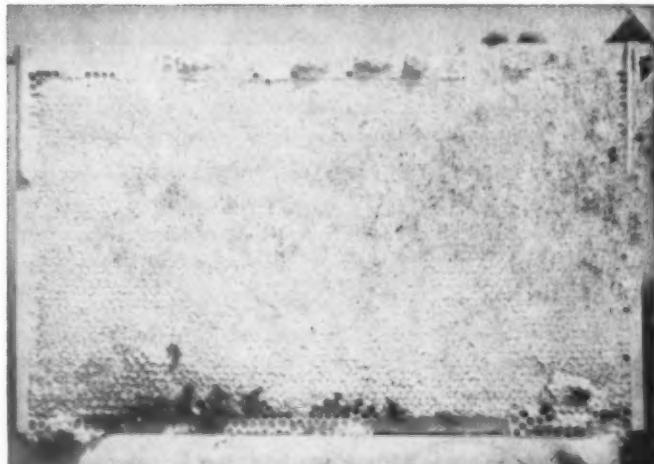
"Practically all types of ammunition are coated with beeswax, from rifle cartridges up to 16 inch shells. It neither expands in jungle heat nor cracks in the sub-zero cold of airplane guns, high in the stratosphere, so shells never stick. Beeswax is used to waterproof delicate wiring and coils, in airplanes, guns, and tanks. The typical war machine contains 10 pounds."

So, when you trade your wax, for supplies, for foundation, or for cash, you are doing your bit. Don't even burn up or throw away your slumgum. Ship it to us for testing. Dry it; ship by freight collect in double gunny sacks, billed as "beeswax refuse." We will get the wax out of it, deduct the freight and rendering, buy the balance, sell you goods in exchange, or mail you a check to cover. If we don't get enough wax to make it pay, it will not cost you anything.

DADANT & SONS : Hamilton, Illinois



Turn your wax into Dadant's Crimp-wired Foundation. It will give you combs of brood like this, that will make you big colonies for years.



Honey filled combs that pour out pounds into your extractor, at full speed, with safety; solid combs, that, with care, will last you almost as long as your hives.

• EDITORIAL •

WE ARE GRATEFUL

THE story is told that the manager of a large western brass works, whose business had been seriously affected by a mandatory order from a Washington bureau, appealed to War Production Board for modification of the harsh rule. Days passed; nothing happened. Finally, with no thought of being sacrilegious, but because he could find no other words with which to express his thoughts, he sent the following telegram and got immediate relief.

"Our father who art in Washington,
Hallowed be thy name.
Thy orders, come thy will is done
Out West as in Washington.
Give us this day our authorization,
And permit us to operate,
So we may forgive those who close our plants
against us;
Add not to our hardships,
But deliver us from red tape,
For yours is the power to keep our country
In glory forever and ever.
—Amen."

There have been days when someone in the bee-keeping industry might have sent such a telegram to Washington if he had had the ingenuity of the western gentleman. For the present there appears to be no reason for such a telegram. For this we are grateful and wish to take this opportunity to express for the beekeeping industry our thanks. For unlimited 60 pound tin cans for our 1943 crop; for unlimited glass closures; for unlimited production of beehives and beecomb foundation; for tires and gasoline; for 100 per cent production of other bee supplies; for beekeeping considered essential; for beeswax at 41½ cents and honey at 12 cents. These are the things for which we are thankful!

So, before we've been rationed, taxed, waaced, waved, ceiled and floored—Before we get through passing the ammunition to knock the Japanazis permanently slap-happy—Let's take time out to say thank you to Jim Hambleton, chief, Bee Culture Laboratory; Russel Palen, and Harold Clay, and Wm. R. Nolan, Food Distribution Administration; W. L. Clark, chief, Wood Fabrication

Section, WPB; Paul Henry, Office of Agriculture War Relations and J. W. Crofoot, Farm Machinery and Equipment Division, WPB. There are others. No list would be complete. But, in particular, we want these men to know that we feel they have done a grand job, one for which we are grateful.

— v —

WATCH RESERVE STORES

LATE spring is often the most critical time for bees which are not provided with large reserve stores. With heavy brood rearing in progress stores are consumed very rapidly and should pasture fail strong colonies are likely to be lost. It is not uncommon occurrence for inexperienced beekeepers to lose their best colonies in May or early June when a prolonged period of rainy weather comes. To provide the bees with ample stores to meet any emergency is like money in the bank. It will not be used unless needed but may be a life saver in case of necessity.

It is a safe rule to follow to make sure that there is never less than fifty pounds of honey in each hive in fall or early winter or less than fifteen or twenty in spring or summer. The most profitable investment which a beekeeper can make is in ample reserve stores at all times.

— v —

SPRING DWINDLING

IN the magazines of fifty years ago much space was devoted to the subject of spring dwindling. Likewise in summer much discussion was given to disposal of pollen clogged combs. It seems strange to us now that the old time beekeeper failed to see any connection between the supply of reserve pollen and the prosperity of his bees. Now we recognize the fact that spring dwindling is a pollen problem and that colonies with ample supply of pollen build up rapidly in spring even under unfavorable weather conditions. We no longer worry about pollen clogged combs but realize their value and endeavor to see that the bees have plenty of pollen at all times to insure that brood rearing may continue during a period of dearth.

GASOLINE FOR BEEMEN

THE object of gas rationing is to insure supplies for essential operations. Pleasure driving is of course the first to be eliminated. Beekeepers can expect to be supplied with gasoline as long as a supply is available since food production is imperative.

However, few seem to understand the reason for the short supply, especially in the Midwest so near the source of origin. The war, of course, is carried on by gas driven machines and the amount of gasoline required is enormous. We are told that a modern plane, such as those now dropping bombs on European cities, requires from 10,000 to 20,000 gallons for a single trip. When we remember that hundreds of such planes are engaged in a single action and that they are now conducting round-the-clock operations, we get an idea of the great quantity of gasoline which is used every day in the war zone.

Considering that this gas must be moved to the coast and then carried across the ocean to a front many hundreds of miles distant we see why our supply is short. As action becomes more intense the demand will increase and it will not be surprising if at times we are unable to buy gas here at home, if the army is kept supplied.

In view of this critical situation every beekeeper should make plans to operate with a minimum of travel. If apiaries can be relocated in a way to cut down car mileage it should at once be done. Until the war is won we must anticipate increasing shortages and more restrictions and plan accordingly.

— V —

ENCOURAGE THE NOVICE

IN a recent issue of a British Bee Journal the statement is made that in America we are standardizing the beekeeper by eliminating the amateur. There is a measure of truth in the statement since in recent years more and more emphasis has been placed on commercial production to the neglect of the novice. This has been apparent in the efforts of officials charged with encouraging honey production and has been reflected in turn by the articles appearing in the bee magazines.

The effect of this attitude is un-

healthy and in the final outcome may prove disastrous to the industry. We must have a large amateur class from which to provide replacements for those who change occupation or die. We need, also, the enthusiasm of the amateur in stimulating public interest in bees and hive products. Without such an element the industry cannot remain prosperous.

At times when we have had the largest number of enthusiastic amateur beekeepers there has been the best demand for honey and prices have ruled highest. A few inspectors have assumed that the novice is a menace as a source of spread of disease. The fact is, however, that disease has been spread most often by the large outfit and rarely by the small beekeeper to any serious extent.

Any argument which would discourage beginners is founded on a shortsighted or mistaken base. The most serious problems that beset the industry are the results of over-expansion or carelessness on the part of the commercial outfits.

— V —

TARLTON RAYMENT

THE name of Tarlton Rayment has long been familiar to beekeepers throughout the English speaking world. He is author of a well-known book, "Money in Bees," which has been before the public for many years. Later he published a volume devoted to the honey plants of Australia and also one relating to the native wild bees of that region.

Rayment may have found that there is money in bees but apparently he has found that there may be more of it in other fields. Recently the announcement appeared that he had won the British Empire novel prize of about \$25,000 with a book entitled, "Valley of the Sky." We are delighted to learn that such recognition has come to a writer who has so long specialized in the beekeeping field.

Rayment is a scientist who has obtained wide recognition for his work with bees and honey plants but it is doubtful whether many of his beekeeping admirers knew that he is also a novelist.

Pettit's Package Bees



We are sold out of package bees for this season and we thank all of our good customers for the splendid business they have given us. We regret we were compelled to disappoint so many.

We will have plenty of queens after the middle of May and will announce summer queen prices in the June number.

MORLEY PETTIT, Tifton, Ga., U. S. A.

Beekeepers! Don't Let it Happen Again

While prices are up, prepare to prevent a post-war slump in the honey market such as almost wiped out beekeepers at the end of the last war. NOW is your opportunity to help show America that honey is much more than just a sugar substitute. Every school, women's club, church group, and Rotary Club should learn about honey NOW while America is honey conscious. A photographer with eleven years commercial experience in the honey business has made a set of beautiful 2x2 natural color projection transparencies which tells the story of "Honey from the Flower to the Table." It is an interesting, educational, authoritative, convincing illustrated program.

Order a set today and begin NOW to build in your community a post-war market for your honey. Give a second set to your local high school. Show year after year to biology classes, it will pay handsome dividends in permanent future customers. DO IT NOW! Write for details.

PHILIP PHOTO SERVICE

1954 Pasadena Ave., Long Beach, California

Package Bees with Queen

THREE BANDED ITALIAN

2-lb. bees with queen	\$2.75
3-lb. bees with queen	3.45
4-lb. bees with queen	4.15
5-lb. bees with queen	4.75

Satisfaction guaranteed. Address

THE CLOVER BEE FARM
HESSMER, LOUISIANA

AMERICAN RABBIT JOURNAL

... Shows the Way to Success

Gives the latest news and views of the rabbit world—an illustrated monthly magazine of general and educational features. One year \$1.00; three years, \$2.00; sample 15¢.

AMERICAN RABBIT JOURNAL
Dept. S. Warrenton, Missouri

Package Bees

QUEENS

Italian—Caucasian

PRICES THROUGH MAY 20TH

Lots of:	Queens	2-Lb.	3-Lb.	4-Lb.	5-Lb.
1 to 24 -----	\$.90	\$2.95	\$3.80	\$4.60	\$5.35
25 to 99 -----	.85	2.80	3.60	4.35	5.05
100 to 499 -----	.80	2.65	3.40	4.10	4.75

(Queenless Packages—Deduct Price of Queen)

PRICES AFTER MAY 20TH

1 to 24 -----	\$.75	\$2.80	\$3.65	\$4.45	\$5.20
25 to 99 -----	.70	2.65	3.45	4.20	4.90
100 to 499 -----	.65	2.50	3.25	3.95	4.60

Payable in U. S. Funds
For Queenless package deduct price of Queen

A FRANK STATEMENT OF CONDITIONS THIS YEAR—The demand for package bees is enormous. We are booked to capacity until after May 20th. Conditions might be very favorable and thus enable us to handle a few more orders before that time. On the other hand, they might be extremely unfavorable, so we cannot now book additional business before that date.

We want you to know that we will do everything possible to handle all the business that we possibly can and still not sacrifice quality or service. We expect to devote all of our energy to producing package bees and queens. Even if we are unable to supply your demands and are forced to return your order, we appreciate it just the same and hope it will not inconvenience you unduly.

The STOVER APIARIES
MAYHEW, MISS.

This photo shows a portion of one of our queen yards containing over 6,000 nuclei

ITALIAN QUEENS AND BEES

2 Lb. packages with queen ----- \$3.00 3 Lb. package with queen ----- \$4.00
Extra Queens \$1.00 each

OVERBEY APIARIES, BUNKIE, LOUISIANA



Dark Italian Bees and Queens

LOTS OF	QUEENS	2 LBS.	3 LBS.
1 to 24	\$.90	\$2.95	\$3.80
25 to 99	.85	2.80	3.60

Queens shipped daily from Paducah. Bees f. o. b. our Louisiana bee farm. We will accept wax in trade. Shipments start April 1st. Order bees and supplies as early as possible.

WALTER T. KELLEY CO. : Paducah, Kentucky

PUETT'S PERFECT PACKAGES



AIR CONDITIONED

Service today is our watchword; our aim, to remain faithful always, in your service, with package bees and queens that satisfy. Write today for the story of air conditioning and our service to you.



THE PUETT CO. :: Hahira, Georgia

PACKAGE BEES AND QUEENS

**QUALITY BEES
AND SERVICE**

GARON BEE COMPANY

Progeny-Test Three-Banded Italians. Daughters of Stock Bred for Resistance to A. F. B.

We still have a few openings for packages for late May and a MORE liberal supply for June—In both package bees and queens.

PRICES THROUGH MAY 20TH AS SHOWN ON
OUR APRIL AD.

PRICES AFTER MAY 20TH AS FOLLOWS

	Queens	2-Lb.	3-Lb.	4-Lb.
1 to 24	\$.75	\$2.80	\$3.65	\$4.45
25 to 99	.70	2.65	3.45	4.20
100 to 499	.65	2.50	3.25	3.95

Donaldsonville, La.
Telephone 8614, Telegrams, Western Union

A Changing Picture



ANNOUNCEMENTS that quota restrictions on lumber were lifted led many honey producers to think unlimited supplies of beehives would be available in 1943. It is one thing to get a quota and quite another to then get the material from which to make goods in wartime.

Lumber suitable for beehives is scarce, due to wartime uses of all grades of lumber. Further, the most suitable woods are not only thus scarce, but lumber mills have been greatly hampered by deep snows and lack of labor. Direct government uses take precedence over other orders.

This Company is only now able to take business from bee-keepers who did not buy from us before, and in May will be able to supply requirements of old and new customers. It appears this situation in regard to wooden goods and foundation will enable us to handle all ordinary orders in May and June for wooden goods. We have ample foundation stock at all points. Send us your beeswax for cash or trade, we pay ceiling prices.

G. B. LEWIS COMPANY : : : Watertown, Wisconsin

**BRANCHES: COLONIE & MONTGOMERY STS., ALBANY, N. Y., 1117 JEFFERSON ST., LYNCHBURG, VIRGINIA;
118 SO. LIMESTONE ST., SPRINGFIELD, OHIO; 214 PEARL ST., SIOUX CITY, IOWA**

SEND YOUR ORDER TO OUR OFFICE NEAREST TO YOU



GENERAL DOUGLAS McARTHUR
(Photo from U. S. Army Signal Corps)

ALTERNATIVE PRICING SYSTEM FOR EXTRACTED HONEY

Maximum Price Regulation 275, "Extracted Honey," was amended March 29, and became effective April 3, 1943. This was Amendment 4 to MPR 275. The amendment provides for several changes which will be good news to beekeeper-packer as well as the larger packer and co-op packer.

Most important is the provision of an **alternative pricing method** for packaged honey based on specific dollar and cents per pound figures. The table published with the new amendment gives maximum prices for fifty-five sizes of packaged honey ranging from 2 ounces to 12 pounds. According to the OPA press release of March 29th, this elaborate schedule of prices is based on a basic maximum price of 21 cents for a one pound jar sold to a wholesaler and was arrived at in a study of representative packer's cost figures and selling prices. It is above the maximum prices computed under the regulation of those packers who were involved in a price war in the base

period but below the maximum prices of many others.

OPA further states that the **alternative method is temporary** and the regulation will be completely revised as soon as possible, probably with specific maximum prices throughout. The **alternative method** meanwhile will allow packers who made no sales of honey during the base period, or who failed to keep records for that period, or who were not otherwise able to apply the formula method to compute their maximum prices.

The section in the amendment points out that the seller may take as his maximum price for any item of "packaged honey" either the prices established by the formula method or the prices in the following table. Persons who price their honey in accordance with the prices in the table do not have to file two copies of Forms No. 1-A, 1-B, and 1-C with the Office of Price Administration, Washington, D. C. The prices in the table are f. o. b. packing plant and are prices before discounts of any kind. Each seller shall reduce these prices to reflect his own customarily established trade allowances, including but not limited to discounts for prompt payment and quantity sale.

The amendment also provided for

a maximum price of 15 cents per pound for bulk honey sold by the producer directly at the retail level. The maximum price of 12 cents per pound to the producer still remains in the case of sales of bulk honey to wholesalers, packers, etc. It is our interpretation that a producer can not charge more than 12 cents per pound for honey in bulk form f. o. b. his shipping point sold to governmental, institutional, industrial, and commercial users. Bulk honey is redefined as honey in containers of more than 15 pounds capacity.

Other changes not having direct effect on the beekeeper include the removal of honey from Regulation 255 through Amendment 7 and from Regulation 256 through Amendment 4 (both of these regulations pertained to ceiling prices for the wholesaler and the retailer) and provides fixed mark-ups for the wholesaler and retailer through Amendment 13 to Maximum Price Regulation No. 238 and Amendment 12 to Maximum Regulation No. 237, respectively.

We suggest that large and small packers secure a copy of Amendment No. 4 to MPR 275 by writing to OPA office, Washington, D. C.

— V —

FDO 47 SUPERSEDES M-118

The Food Distribution Administration issued Food Distribution Order No. 47 and No. 47-1 entitled "Conservation and Distribution of Honey," April 6, 1943. This order supersedes General Preference Order M-118 of the War Production Board as amended which dealt with the distribution and consumption of honey in products of various types. The

CEILING PRICES ON "PACKAGED HONEY"
(F. O. B. Packing Plant)

Size Container	Prices on sales to wholesalers commercial, industrial, governmental and institutional users			Prices on sales directly to retailers			Prices on sales directly to domestic users
	Price per case of 24	Price per case of 12	Price per case of 6	Price per case of 24	Price per case of 12	Price per case of 6	
2 oz.	\$ 1.41	\$.76		\$ 1.61	\$.87		\$.08
4 oz.	1.81	.96		2.06	1.09		.10
8 oz.	2.77	1.44		3.16	1.64		.15
16 oz.	5.04	2.57		5.75	2.93		.28
2 lb.	9.42	4.76		10.74	5.43		.52
3 lb.	13.61	6.85		15.52	7.81		.75
5 lb.		10.18	5.09		11.61	5.80	1.11
10 lb.			9.64			10.99	2.12

purpose of the new order is similar to that of M-118; to provide for adequate and equitable control of the distribution of honey to manufacturers in order to conserve supplies of honey available from time to time. As in the case of M-118 the order applies to honey in any extracted or comb form.

The general restrictions are that no person may accept deliveries of honey which will increase his inventories beyond a practicable, minimum, the case of M-118 the order applies to liver honey to a manufacturer if he has knowledge or reason to believe that he is not entitled to receive the honey; and no person may use more honey in manufacturing products than his quota as determined by the Director of the Food Distribution Administration.

Quotas are defined in FDO 47-1 as 120% of the amount of honey used by a manufacturer during the corresponding three month period in 1941, the first period ending June 30, 1943, or 600 pounds, whichever is greater. This ruling applies to subsequent three month periods until otherwise changed. Exempted from the quota of a manufacturer is the amount of honey consumed in products for the Army, Navy, Marine Corp, Coast Guard, any person or organization designated by the Director, and any agency of the United States Government purchasing products for any other Government under Lend Lease; providing that the use of honey is required by the purchaser's specification.

Permission to use honey in a new product or for increased quotas must be applied for to the Director who may assign special quotas providing the honey will not be used primarily in place of sugar. Any person who considers that the order will work an exceptional and unreasonable hardship on him should petition in writing, in triplicate, to the Director for relief. Each manufacturer who purchases during any month 10,000 pounds of honey for use in manufacturing products must report his purchases within ten days following the close of the month to the Director of Food Distribution, United States Department of Agriculture, Washington, D. C., specifying the seller, the amount purchased and the intended use of the honey. The records, premises, and stocks of honey of a manufacturer are to be available to inspection at any time upon request of the Director.

— V —

NEED BEES TO MEET WAR GOALS

U. S. D. A. Radio Service, March

27, carries this heading as part of the broadcast release:

"We have an informational job to do to acquaint beekeepers and farmers with the importance of bees in wartime—for pollination of legume seed crops, fruits, vegetable seeds and other crops. The big job is pollination. A good share of our informational job is to make clear that we must maintain bee production to reach goals of such apparently unrelated products as carrots, milk, cheese and pork.

"The legumes primarily concerned are alfalfa,—and red, crimson, alsike sweet, white and Ladino clovers. You know about the tremendous amount of nitrogen going into munitions—and about the limited supplies of nitrogen fertilizer for crops; it goes without saying that we need legumes to take up the slack.

"If we are to rely more on legumes, we must have seed.—Our allies would like to have all the seed of certain legumes we can spare. England wants especially red and alsike clover—Russia, mainly alfalfa—Our legume seed production is hardly enough to meet current needs, and yet we need to build up a stock pile of probably 100 million pounds of seed in 1943-44-45—for emergencies and postwar needs."

"This year corn, soybeans, peanuts, hemp, and other war crops are cutting deeper into legume acreage. Farmers will be inclined to pasture legume crops more heavily, and to cut more legume hay; that means less seed harvested. To meet legume seed goals means getting larger yields of seed to the acre. The only practical way to get more seed from a given acreage is to see that the crops are well pollinated; that means at least one hive of bees to each acre. Good pollination might well mean 4 or 5 more bushels of seed to the acre."

— V —

KEEP AFTER THAT FARM SCRAP

A concentrated effort is being made to get all of the scrap iron and steel that can possibly be obtained into the hands of those plants needing it for war production, notwithstanding the fact that no actual iron and steel production has been lost for many weeks, it is not safe to assume we are out of the woods for the rest of the war so far as iron and steel scrap is concerned.

There will be a demand all through this period for the heavier grades of scrap for both the open hearth and the electric furnace. Because scrap

originating on farms is heavier and superior to that from other sources, industry must look to the farmer for major support in 1943.

Comb over your farm and assemble your scrap at a central point and see that it gets in the right hands.

Rural women can do their share. A survey indicates that the American farms to date have given less than half of their available scrap. Rural homes, barns and other buildings, farm yards and fields contain this material. The women can help by searching from garret to cellar for usable things. They can urge their husband and children to survey the farm buildings and fields. They can urge neighbors to do the same.

Here is a list of scrap items most likely to be found on farms: broken garden tools; old car bodies, chassis and parts; plows, harrows, rakes and other machinery; gears and flywheels; scythe blades; oil drums, kerosene cans; useless tractors and parts; long transmission belts, of either rubber or fabric; wagon wheel rims; iron horse troughs and feeding racks; barrel hoops, old water pumps; rolls of wire; old shears; old wire, old metal fence; old pipe, old pails; abandoned windmills; water tank towers; old line shafts for threshing; old grist mills.

— V —

DEFERMENT

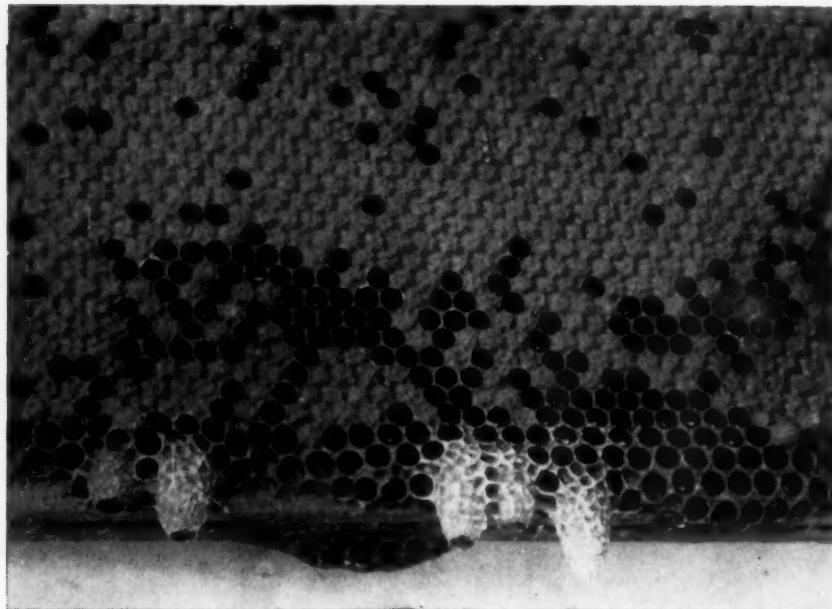
Under the Selective Service regulations, a beekeeper should have about 400 colonies of bees, which amounts to 16 war units, required for the deferment of one worker. If he has fewer than 400 colonies of bees, he might fill out his 16 war units for deferment with chickens, dairy cows, or some other essential farm product. However, beekeepers will face labor shortages, along with all industry. A way to meet this problem may be to draw on the help of women and children. You just can't turn bees over to beginners. It takes years of experience to master beekeeping. But, even a man working full time in a war plant, can supervise women and children in a lot of the work, especially in the honeyhouse.

However you manage it, try to keep your bees working through the war. It's not just the honey and beeswax we need. Remember, the bees help produce the legume seeds for crops to keep our soils up for important war crops and to feed our flocks and herds to meet goals for milk, butter, eggs and meat. (U.S.D.A.—Farm Flashes.)

FEATURES



Pears in bloom; late this year, due to general long continued cool weather; still among the first heavy blooms of the season. (Photo by Paul Hadley, Piggott, Arkansas.)



At left, a beautiful group of almost snow white swarm cells, general signal that something must be done. When the virgins have emerged, as in the picture above, it is then too late for any control measures.

RELOCATION AS A MEANS OF SWARM CONTROL

By G. H. CALE

DEMUTH, in his famous analysis of the conditions of swarming, in his bulletin on swarm control written for the Department of Agriculture (a classic, which should be in every beekeeper's library) said that successful swarm control was based on reproducing either the conditions of the swarm or of the parent colony. This means, in the case of the swarm, that it must have the field force with the queen and little or no brood; or in the case of the parent colony, the young bees and all the brood. Any system of control of swarming must recognize this essential basis if the measures are to be a success.

Applications of this principle, in management, resulted in the general adoption of the modified Demaree method of swarm control as described by E. S. Miller in this issue, on page 194. Another application was the shaking treatment which removed the young bees and brood from the old stand, leaving the old bees and queen.

Since swarming is apparently also closely associated with the desire of the colony for supersedure, the plan of removing the old queen, cutting out queen cells in ten days, and giving a new young queen, which has been tested previously in a nucleus, or in-

serting ripe queen cells, has been followed by many.

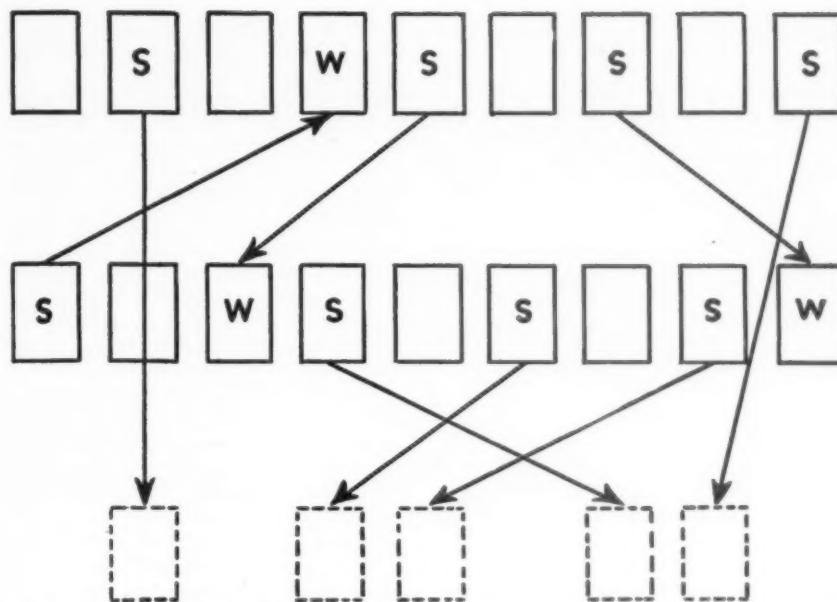
The most frequently given advice for those who want to know how to control swarming is to cut queen cells out every ten days until the bees are so absorbed in honey gathering that they will not try to swarm any more. This, of course, is a desperate expedient entailing a lot of labor and attention, although it often works with fair satisfaction.

Some method of controlling swarming which will take advantage of the basic analysis of Demuth has become necessary in commercial honey production which will involve the least possible amount of labor and attention. We stumbled on to what we call the relocation plan by accident, in an emergency period, several years ago when colonies, exceptionally strong in bees and with large amounts of brood, were confined to their hives just before the main honeyflow by a period of bad weather, which, in many seasons, results in heavy swarming. An examination of the bees showed that anywhere from a third to a half of the colonies in every yard were preparing to swarm and something had to be done. There were too many bees to allow us to go through the

labor which was required before applying any of the old measures. So we sat down under a tree to study over the possibilities and in discussing the fundamentals of behavior along the lines of Demuth's ideas, we came to the conclusion that by a simple expedient we could provide the conditions which he suggested in a much quicker fashion than any of the plans which had been used. So was born the idea of relocation. The accompanying diagram will show how this plan is used.

We go through the entire yard and make a diagram like the one shown here. Then we plan our relocations as indicated by the arrows. Any colony with swarming cells is then looked over, all cells destroyed and the colony is placed either in the position of a weak colony needing help or in a new location at the front or back of the yard, sometimes at the side. The diagram (for simplicity) shows relocating at the front.

Now if you will follow the arrows, you will see what has happened. In each case where a colony with swarm cells is exchanged with a weak colony, the weak colony picks up all the field force of the larger colony which was intent on swarming and the large



Follow the idea in this diagram in using relocation in swarm control. Either exchange swarmers with weak colonies; or set them in new places, but never in front of their old locations.

colony loses a large part of its population. This is equivalent to taking away all the field force, but leaving the young bees and queen. Now, if the bees in the colony which intended to swarm are in need of a new queen through supersedure, they will build more cells and we have found that allowing them to proceed with the supersedure will result in a new queen with very few swarms. You may get some because you didn't pull down your population enough and the weak colony was not weak enough to drain away enough bees, but in most instances you will have a new queen through supersedure and no swarms.

If there are not sufficient colonies for exchange or there are not enough sufficiently weak so that the drainage can be depended upon to be ample, the swarm colonies are relocated in new positions as indicated by the arrows, leading to the dotted line

positions in the front of the yard. These colonies will, of course, immediately lose all their field force, which will drift back to the old location and go into neighboring hives. This is of little importance because the addition of the field force to the other colonies will not result in a loss of crop. If you will take any of the old plans and compare it with this, you will find that your total crop of the yard is just as great, often larger, by the relocation method. Colonies relocated in new positions which have thus lost practically all of their field force, if they are intent on supersedure, will get new queens without any trouble. This so simplifies the attention to swarming that, in commercial honey production, it will be found to be a valuable expedient.

Illinois.

— V —

TWO WAYS TO REQUEEN A LAYING WORKER COLONY

By JOE MARTY

I will give you my way of requeening a laying worker colony. The success of it, which has been 100 per cent, is based on the fact that any bees confined to a hive for a long time tend to lose their sense of location. Remember that laying workers trying

to assume the duties of a queen have remained in the hive a long time.

1. First go to your scrappiest, meanest colony and stir it up until it is boiling over for a fight. Take the laying worker colony as quietly as possible, and shake every bee in front

of the outlaw colony, and replace the hive on its own stand, or better still, a few feet from where it stood, with a couple of combs of brood from some other colony and a new queen in introducing cage between the frames.

The bees that have been loafing in the laying worker colony will in their sudden confusion fly to the outlaw colony and be killed. The field bees will fly back to their old location and be happy they have found brood and a queen. Do not bother the colony for a week. I have requeened dozens of them in this way.

If one is to get any good from these laying worker colonies, the bees in them must be utilized as quickly as possible because they are old bees and their lives are short. To utilize them to the fullest advantage, proceed as follows:

2. Set a nucleus in a large hive body about ten feet to one side of the laying worker colony, and the brood in the nucleus placed at the farthest side from the laying worker colony. Put a comb of brood from some other colony in the other side of the hive. Now shake the bees from the laying worker colony as previously described, and put in all available combs from it to fill the new hive body. The bees from the laying worker colony, flying back to their old location and not finding their hive, will eventually fly to the new hive too and finding some of their own combs will collect on them. The field bees from the nucleus will fly back to their old place and enter a nearby hive, and hence will not be lost. The new colony now consists of a young queen ready to lay with nurse bees and field bees ready to bring in supplies. In a week or so, the hive should be full of brood.

So here are two ways for handling the laying worker. Try them and be convinced.

Oregon.

(One man claims laying workers are of little value, so unite them. Another, like Marty, saves them. Take your choice.—Ed.)

— V —

BANANAS AND HONEY

Bananas dipped in strained honey, lightly sprinkled with lemon juice, and a little salt, and baked 15 minutes in a moderate oven makes a delicious side partner for broiled fish steaks or fillets, chops or chicken.

Alfred Pering,
Florida.



W. E. Dunham

THE Modified Two-Queen System worked out by the Ohio Experiment Station and tested for its usability for commercial growers is based on the principle employed in the Standard Two-Queen System on which Dr. C. L. Farrar and Prof. C. H. Gilbert have recently published papers.

First, it is essential to understand the difference between the standard two-queen system and the Ohio

THE MODIFIED TWO-QUEEN SYSTEM FOR HONEY PRODUCTION

By W. E. DUNHAM,
Research and Extension Apiarist,
Ohio State University

modified two-queen system. The standard two-queen system utilizes two queens at least during a part of the building up period and throughout the harvest period. Supering involves going through the colonies every 10 days and supering the lower and upper units which are each headed by a queen. This system is best adapted for a region characterized by a long honeyflow and represents an intensive type of beekeeping where maximum yields of honey are harvested.

The Ohio modified two-queen system embodies the use of two queens in a colony during the building up period; the reducing of such colonies

to a single queen system during the early part of the clover flow; and the arrangement of supers at this time so that "top supering" is necessary only during the remainder of the harvest period. Since the duration of the clover flow in Ohio seldom covers a period of more than 8 to 10 weeks, the modified two-queen system provides all the advantages offered by the standard two-queen system, as far as storing strength of a colony is concerned, thus insuring practically the same potential possibilities for surplus honey. The fact that the colony is reduced to a single queen system when the equipment is light in weight insures rapid manipulation and makes

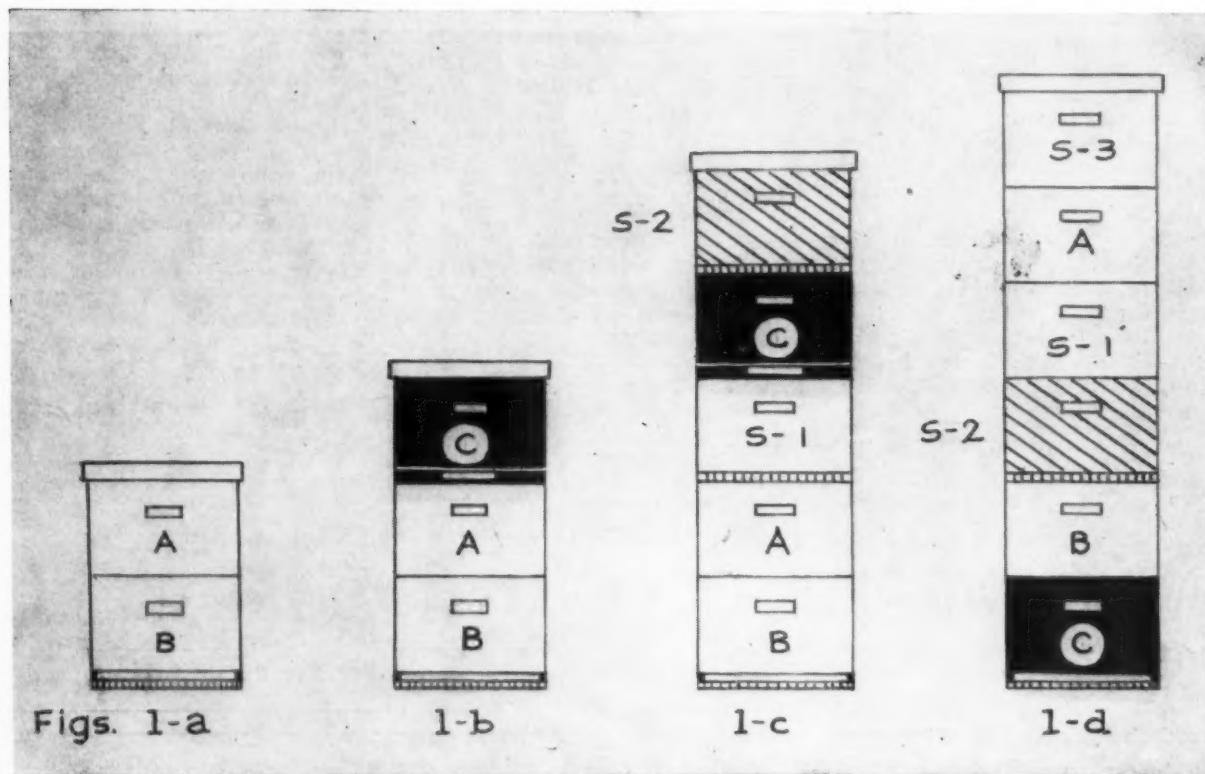


Fig. 1a—Represents a 2-story colony during the early spring period. Fig. 1b.—Arrangement of the 2-story colony (Fig. 1a) for the two-queen system. Fig. 1c—Extracting supers added to both units with queen excluders over the brood nests. Fig. 1d—The two-queen colony (Fig. 1c) reduced to a single queen system and the hive-bodies arranged for most advantageous storage.

NOTE—Recommendation concerning super manipulation applies to an average season where approximately 100 pounds is ordinarily harvested per colony. With this modified two-queen system there should be about a 200-pound average or more.

this system practical to the commercial honey producer. Another equally important feature from a commercial beekeeper's standpoint is that super manipulations are completed at this time except for later "top supering."

Spring Manipulation of Colonies

Colonies rating from medium to strong in bees and possessing seven or more frames of brood are ideal for this system. At the beginning of the fruit-dandelion flow, or previous, if colony strength warrants, colonies should be selected for the manipulation. Briefly, the manipulation involves removing from the parent colony three or more frames of emerging brood and adhering bees and three frames of honey. The frames containing brood, bees, and honey are placed in a hive body and set over the parent colony with a double screened inner-cover separating the two units. An entrance for the new unit is provided in the front portion of the inner-cover. A young laying queen purchased from the South is introduced immediately to the upper unit. At this time it is desirable to clip the wings of the young queen as a means of keeping a record of her age and also as a swarm control measure. (See Figures 1a-b).

There are two features of the specially constructed inner-cover used in these tests which are important. (See Fig. 2). (1) The double screening of the inner-cover with a $\frac{1}{4}$ -inch space between the two screens prevents any communication of the bees in the parent colony with those in the upper unit, and, as a result, queen introduction is not a serious problem. (2) The heat from the lower unit rises and is of material aid in a more rapid development of the weaker unit. While less desirable, an ordinary hive inner-cover may be used with a screen covering the upper and lower surfaces surrounding the bee escape opening. A slot may be cut in the rim of the inner-cover to provide an entrance.

In cases where one-story colonies are used, a hive body of dark combs should be added to provide a two-story brood nest to the parent colony, thus supplying adequate breeding and storage space.

Successful Establishment of upper unit vital. Beekeepers arranging colonies for this system may encounter disappointment in getting the upper unit properly established. For success, it is imperative to select frames of **emerging brood with plenty of young bees** adhering to the combs. Only the young bees will stay in the new hive body—the older bees, when taking flight, will return to the parent colony. If, when establishing the

upper unit, there is any question of a lack of young bees, it is wise to make up any deficiency by shaking the bees off two or three frames from the parent colony into the upper unit. Care should be taken to make sure that the old queen is not on these combs. Loose grass placed in the entrance of the upper unit will encourage more of the bees to stay in this unit. An ideal time to manipulate colonies is during a light nectar flow when there is no tendency among the colonies to rob.

Manipulation in Late May and Early June

The rate of development of these colonies obviously is influenced greatly by weather favorable to bees and blooming plants. Normally, the management already outlined will suffice during the fruit-dandelion nectar flow. In favorable years, there may be a light flow from white Dutch clover as early as May 25, but it seldom becomes intense enough for heavy supering of colonies until June 15. However, under normal conditions of development colonies will need expansion room in early June. A deep hive body of extracting combs should be added over a queen excluder to each parent colony. The upper unit is simply raised and set on top of the extracting super given to the lower unit. At this time, the upper unit should also be examined, and, if it requires room for storage or room for the bees, a shallow, or deep extracting super is added over a queen excluder. The addition of this room is essential, so that the 10 frames in the brood nest in the upper unit will be available for brood rearing (See Fig. 1c). By this time many of the top units will need a larger entrance. When nectar begins to be stored, it is generally necessary in the stronger units to raise one end of the hive body and rest it on supports to provide adequate ventilation.

Reducing the Two-Queen Colonies to a One-Queen System at the Beginning of the Clover Flow

The goal that one should set is to have the two-queen colonies reach the desired strength before the clover flow becomes intense and when the equipment is light in weight. For central Ohio, June 17 to 23 would be the period when the two-queen colonies could be reduced. The two-queen colonies in which sufficient strength has not been attained can be left until the next trip to the apiary, or later if desired. The later the deferring of the reducing of the colonies to the one-queen system, the greater becomes the weight of the equipment which subsequently slows up labor operations.



Fig. 2—Special double-screened, inner cover.

In Central Ohio, normal colonies at the time of treatment should contain 10 to 14 frames of brood in the lower unit, 8 to 10 frames in the upper unit, and bees overflowing in the hives. There should be a continuous nectar flow so that by the addition of smoke at the time of uniting these two units, there is no tendency among the bees to fight.

To reduce the two-queen colonies to a one-queen system, the following procedure is outlined. The upper unit containing the young laying queen is placed on the bottom board of the parent colony, and the old queen in the lower unit is found and removed from the brood nest. The frames of brood in the hive bodies A and B are arranged so that hive body A is full of brood and what frames of brood are left in hive body B are of the emerging type. Hive body B is now placed over brood nest C. Super No. 2 containing drawn extracting combs, bees and new nectar, is now placed over the queen excluder, and then follows super No. 1, which is also well filled with bees and nectar. Brood nest A is now placed over Super No. 1 and then super No. 3 is placed on top. If the colony needs more storage space during the honey flow, supers may be added advantageously by the "top supering" method (See Fig. 1d).

It should be pointed out that the field bees in the upper unit will persist in attempting to enter the hive at the location of the upper entrance. To meet this situation, one of two methods may be utilized depending upon the preference of the beekeeper. A queen excluder may be placed under brood nest A, but slid over far enough on the super below so that an entrance is provided. The use of the queen excluder will prevent virgins emerging in brood nest A from mating and establishing a brood

nest in the supers. The other method involves stacking the supers bee tight, which forces the field bees established in the upper entrance to drop to the lower entrance of the parent colony. Virgins, which may emerge from brood nest A, will not bring about swarming when either of these two methods is followed.

Advantages of the Modified Two-Queen System

The management of colonies by this system insures an enormous bee population at the beginning of the white Dutch and alsike clover flow. The reserve strength in the form of brood insures an enormous number of

field bees for the sweet clover flow and the presence of a young queen having the ability for heavy egg laying maintains the peak of bee population for the late sweet clover and alfalfa flow.

Requeening is accomplished with no interruption in brood rearing. Providing a two-story brood nest which supplies an abundance of breeding space to the young laying queen at the beginning of the clover flow is a primary factor in minimizing the swarming problem during the honey flow. The arrangement of supers which are already occupied by bees and new nectar, as well as the position

of brood nest A, insures equal distribution of the bees throughout the storage space which is a primary factor in the maintenance of colony morale.

When colonies are reduced to the single queen system, the brood nest as well as the supers are manipulated for swarm prevention which means that the majority of the colonies will need no further attention from the standpoint of swarm control measures during the harvest period. While in the majority of cases four supers will be sufficient for a colony, yet some of the better colonies will need additional supers which may be supplied by the "top supering" method.

— V —

SWARM PREVENTION

By E. S. MILLER

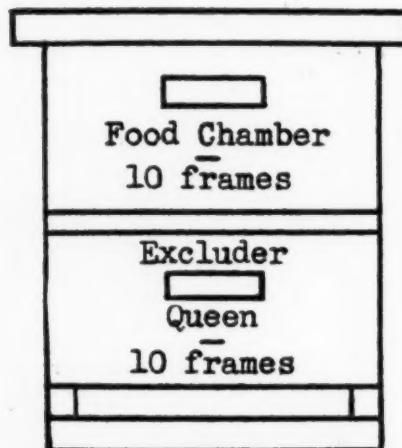
BACK in my early days of bee-keeping when operating four or five hundred colonies, swarming was a major problem. Many swarms escaped from outyards and a multiplication of small colonies from those swarms which were captured necessitated an ever increasing investment in hives. Now, after nearly forty years of beekeeping, the problem appears to be solved.

In the last three years, with much stronger colonies, there have been no swarms so far as I have been able to determine and for several years previous to this period, swarming was negligible. Furthermore, the per colony production has been increased and the amount of labor lessened.

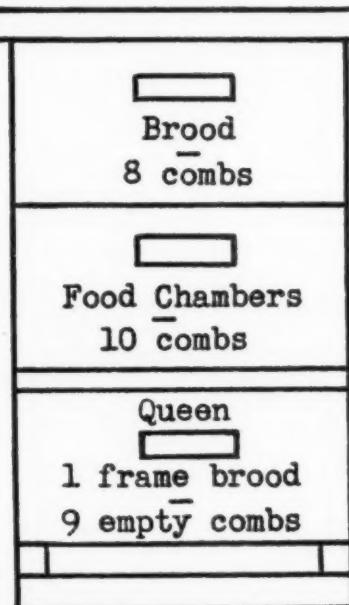
If swarming is to be prevented or is to be reduced to a minimum, there

are several conditions to be observed:

1. Queens should be bred only from the best non-swarming stock, or, in other words, from the best and most productive colonies that do not try to swarm.
2. Failing queens, and all queens over two years old, should be replaced, otherwise attempts at supercedure may tend to induce swarming.
3. Defective combs and those containing more than about five per cent drone cells, and all of those not built entirely down to the bottom board should be discarded, or at least kept

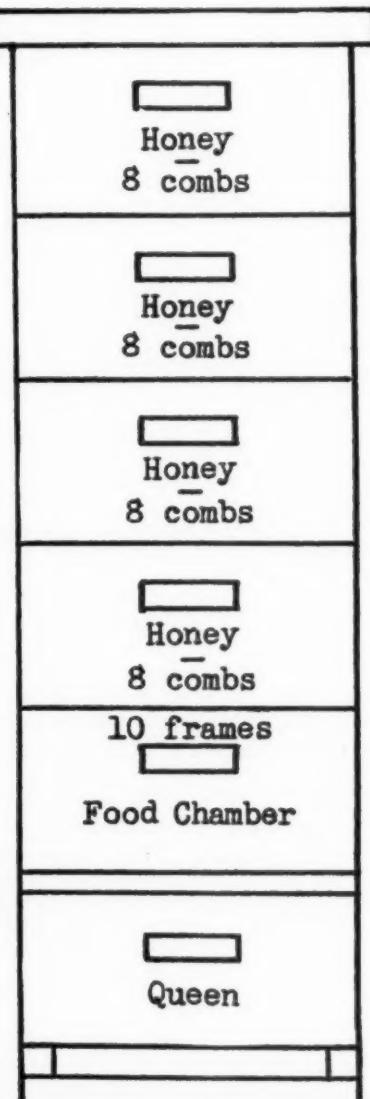


May 1



June 1

out of the brood chamber.
(Please turn to page 203)



August 1

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BEEKEEPERS IN WASHINGTON

We have been interested readers of the Journal for several years but so far we have not put in our "two bits' worth" of how we go about beekeeping and selling honey in the Willamette Valley in Oregon. It seems many of us get into the habit of leaving the spreading of bee wisdom to others, forgetting that some little ideas of ours might be of inestimable value to someone else.

The Willamette (pronounce it like "dammit") Valley is just about ideal as a beekeeping country—if not always a 100 per cent honey producing country. We have very mild winters, so packing or cellaring is entirely unnecessary. We have no high winds or hail storms in the summer and it is never hot enough to worry about the combs melting down. The bees start brood rearing in January almost every year, and never later than February. Pussy willows and filberts are the earliest sources of pollen and there is always enough favorable weather to insure the bees gathering a good supply. April brings fruit bloom and the bees are usually sufficient in numbers to start laying up a surplus. May brings all kinds of wild flowers, berries, clovers, and vetches.

Our real flow starts about the first of June and comes mostly from clover and vetch. Then the flies begin to alight in this beekeeper's paradise. The end of June sees the end of all nectar-secreting blossoms and the bees begin to start signing up for their unemployment insurance, so to speak. Here there is no summer or fall flow whatever, as there is little irrigation as yet and the seasonal rains do not begin early enough to do any good.

Our only opportunity of supplementing the sometimes meagre spring flow is to move to the fireweed districts in the coast range. But of all the nectar bearing plants we have heard about, we believe fireweed is about the most fickle. We have drawn blanks two and three years in succession and then have been rewarded with a 200-pound surplus. But nature is not entirely merciless—we often get a good crop in the valley and a poor one in the mountains, and vice versa.

We have at present 900 colonies and always plan a little expansion each year. We pack and distribute all our own honey and never fail to do our bit in advertising the true value of honey. We believe honey is

The top picture, Burt calls "Ready for work,—tough, what?"; center, "Ready for business,—Oh, honey!"; and, at the bottom, "Ready for play, oh, boy!"



too fine a food to be damaged in any manner, on its way from the bee to the consumer, so we religiously try to do nothing to impair its flavor, aroma or color. Beekeepers and packer are responsible for far more poor honey than the bees are, and it is our opinion that honey consumption could be greatly increased if the beekeepers and packers used more care with the product.

We do all our extracting just as soon as the honey is properly ripened. Our honey is in the cans long before the bees are prepared for the winter. No capping melter honey is mixed with our extracted honey. Cappings are whirled dry in a separate machine and the honey remaining in the cappings is sacrificed in the melting vat

rather than run the danger of darkening or impairing the flavor of the rest of the crop.

Instead of using the conventional hot water vat to melt down the granulated sixties, we have developed a little room where the melting is done by electricity under thermostatic control. The heat is never allowed to get above 140, and we can treat the whitest honey in this manner without appreciably darkening it or injuring its flavor. And we save a world of trouble and mess as well. Of course our honey will regranulate in due time, and it does not "sparkle" like a filtered product—but you'd be surprised at the number of customers who say: "Your honey seems to be different." It really isn't different at all—it just hasn't been ruined.

We service the stores in our territory once a month. The storekeepers do not seem to mind if we carry a dust cloth with us and shine up the remains of their last order, and pick up the granulated honey and exchange it for freshly packed honey. In those stores that have the room and buy enough of our product we place a wire rack that holds about 200 pounds and affords an excellent display of all our different containers. This takes it out of the sometimes dark corners where the syrups, sorghums and other manufactured sweets hold forth, and puts it in a class all by itself, where it belongs.

Mr. and Mrs. John D. Burt,
Oregon.

— V —

HINTS ON SWARM PREVENTION

We Cannot Entirely Prevent Swarming, But We Can Reduce it to a Small Percentage

By HENRY J. RAHMLOW

THE important job for the month of May is to reduce swarming. Has any one been able to prevent swarming 100 per cent by a practical method, one which will allow the beekeeper to make a profit on his labor? I haven't. However, we can reduce it to a percentage so low that the method is profitable.

The best method therefore, is the one which requires the least amount of labor and gives us the largest crop of honey.

Never Reduce Brood Rearing

Another requirement is that our method must never at any time reduce brood rearing. We have again passed through a winter which saw thousands of small colonies die. Starvation and small populations are proving a nightmare for many beekeepers.

Whatever our system, it should permit the queen to lay to capacity from January to October.

Years ago we tried the Demaree system. It prevents swarming—but there is a decided reduction in egg laying when the queen finds herself on one frame of brood, with only a few bees to help expand a new brood nest. About three weeks later there begins a reduction in the number of bees—at a time when we need them most.

We know that the queen prefers

to move upward in expanding the brood nest. Only if she is forced to do so will she move downward. Queens lacking in vigor may confine their egg laying to the upper two brood chambers, and if nothing is done about it, may swarm with plenty of room below.

Swarming occurs according to Dr. C. L. Farrar, of the Central States Bee Laboratory, when the colony **cannot expand normally, in an upward direction.** Colonies of medium strength may surround the brood with honey and pollen, blocking off and occupying only a small portion of their hive. This area may soon become so crowded that queen cells will be started. Such colonies must be watched carefully and a brood chamber given above before this congestion takes place.

Strong colonies with vigorous queens wintered in two brood chambers may not require as much careful attention as those with less vigorous queens. Good queens will fill the upper brood chamber, then move downward to lay in the one below. However, the two brood chambers should be reversed as soon as the queen begins to lay in the lower one because she prefers to expand the brood in an upward direction.

We have adopted the system of reversing brood chambers, following Dr.

C. L. Farrar's plan, with excellent results. In fact, swarm control has been as good as with any system we have tried and there has been such a saving of labor that we can now keep more colonies than formerly.

Several beekeepers have written that they were unable to control swarming by the method of reversing brood chambers. Any method will fail if not used correctly and that is especially true of this one. To be successful, here are the steps we must follow:

Reverse Brood Chambers

1. When the first brood chamber is filled with brood and bees, but before there is any noticeable congestion, the brood chambers are reversed, the empty one being placed on top so the queen will expand the brood nest upward, as she prefers to do.

2. In a short time the queen should be laying in the upper brood chamber. Since bees do not like to have brood separated by a barrier of honey, they will move most of the honey from above the brood in the lower body and place it in the upper.

About fourteen to eighteen days later a good queen should again have the upper body filled with eggs and larvae and will again be looking for space to expand upward. Now we

must again be on the job to prevent congestion which may lead to queen cell building.

By this time the older brood in the lower body will have hatched, leaving empty cells which the queen will use for laying if she finds them where she prefers to go upward. We therefore reverse the brood chambers again, the queen again goes upward, finds plenty of empty cells, and all is well.

3. After two brood chambers are filled with bees, the queen will be laying at the top of her ability—from 800 to 1000 or even more eggs per day. The brood chambers may now have to be reversed again in about ten days.

During Fruit Bloom

4. During the dandelion and fruit bloom period nectar may come in which may create a crowded condition. A third empty hive body should now be placed on top of the brood chambers—**without** a queen excluder between. The reason we do not use a queen excluder at this time is that colonies of medium strength will refuse to go through the excluders and will store the honey in the brood chambers, thereby reducing the size of the brood nest. This we should avoid at all times.

If the excluder is not used at this time, the queen may go upward and lay in the third body and the honey will be stored there. When the flow from fruit and dandelion is over, we can place this body on the bottom board. The honey will later be carried upward for winter stores, helping prevent the starvation so serious this winter.

When To Use Queen Excluders

Right here let us consider some important points about the queen excluder. It acts as a barrier through which the bees pass reluctantly. If we have strong colonies, they will pass through and store honey above it. During a heavy honeyflow the bees will carry honey through it readily. If we have weak colonies, or if there is a light flow, the tendency will be to store the honey in the brood nest. This we should not allow to the extent that it will at any time limit the size of the brood nest, thus reducing brood rearing and weakening the colony.

The time to use the excluder if our system of management calls for it, is during the main honeyflow, to prevent the queen from laying in extracting supers.

When Top Supering Doesn't Work

Top supering, or placing empty supers above supers filled or partly filled with honey, acts in the same way as an excluder. The honey is a

barrier, and incoming nectar will be stored in the brood nest during a slow flow or by weak colonies. It no doubt works fine in sweet clover regions where the colonies have time to build up, and the flow is heavy.

We have seen honey barriers cause swarming. In large hives, weak colonies will store so much honey around and above the brood that they refuse to go into empty supers above, but start queen cells. In such cases the only thing we can do is to place empty combs on each side of the brood for the queen to lay in, and destroy the queen cells.

Failing Queens

If a queen has been laying heavily in the spring but starts failing, then supersedure queen cells will no doubt be built. If this happens during the swarming season of May or June, then swarming will result. If we destroy these cells before they are sealed it may be possible to stop the swarming impulse. However, if the cells are sealed and the queen already shrunken preparatory to swarming, about the only thing we can do is to Demaree the colony. Place the queen with one or two frames of brood in the lower story and all the remaining brood on top, with empty bodies between.

To Get Results

Years ago a wise Scotchman said "The eye of the master fattens his cattle." The eye of the master will also be necessary to get a good crop of honey this year. Fifty strong colonies which do not swarm will produce more honey than a hundred weak ones.

Wisconsin.

— V —

BEE PASTURE CHANGES

Changing agricultural practices, which are having a bearing on nectar production, are becoming a matter of concern to beekeepers in many places.

The February, 1941, issue of "Western Canada Beekeeper" reports that Prof. A. V. Mitchener, Dean of Agriculture of University of Minnesota, told beekeepers at their January meeting that changes during the past few years might conceivably compel them to produce their own pasture.

Said Prof. Mitchener, there is a growing tendency for farmers to plow under sweet clover immediately after harvesting, to control the sweet clover weevil. Corn is being grown in increasing amounts and is crowding out sweet clover. Where alfalfa is being grown for seed, it has been attacked by an insect which destroys the seed thus making seed production unprofit-

able. This reduces the amount of bloom for the bees.

Changing crop conditions have affected the nectar resources of New Jersey also. Years ago the hill farms of the northern half of the state were well supplied with white clover which produced abundant nectar. Also much buckwheat was grown. This could be depended on for a surplus crop of honey.

White clover in pastures and hay fields now is but little in evidence. Possibly the decreased use of lime on the land has been a factor. Comparatively little buckwheat is planted in the state and surplus buckwheat honey is rare.

The decline in farming on some of the hill country has permitted sumac (principally *Rhus glabra*) to creep down on to the untilled fields. This shrub produces a good crop of excellent honey when weather conditions are favorable.

At a meeting of the New Jersey Beekeepers Association last summer, Prof. Harold Sprague, of the New Jersey Agricultural Experiment Station, outlined a program for pasture improvement in this state.

Although Prof. Sprague did not have in mind a program for improving the nectar resources of the state, it is evident that, when the program has become fully effective, it will be very beneficial to beekeepers. New Jersey, said Prof. Sprague, imports one half of the grain used in the state. By proper pasture improvement, this import could be greatly reduced as improved pasture would take the place of grain for stock to a considerable extent.

After discussing the contemplated program under which non-agricultural land would be turned back to forest, increasing fertility by the use of lime, phosphate, potash and farm manure, clover production could be stepped up 5% to 50%.

This program will result in greater acreage of the legumes. Some of those being tested are Ladino clover, bird's-foot trefoil, strawberry clover and types of alfalfa and red clover which can be pastured.

Clover seed production is expected to increase under this program and honeybees are considered necessary to produce a seed crop although other pollinating insects are present.

Besides the rise in clover seed production Prof. Sprague predicts increased use of alfalfa in hay mixtures, wider use of legumes in pastures and hay lands and increased use of these plants and a larger acreage. Less alsike clover will probably be used as improvement in soil fertility will favor the use of other clovers. Sweet clover doesn't enter the picture.

Elmer G. Carr,
Pennington, N. J.



William Idle, 94 years old, married 66 years, lives at Hulcar; has kept bees 62 years.



James Emney, 90 years old; has lived 54 years on present place, between Enderby and Grindrod.

PIONEERS IN BRITISH COLUMBIA BEEKEEPING

By Wm. H. Turnbull

IN my wanderings around British Columbia doing my bit to make beekeeping safer and easier for two thousand beekeepers east of Spences Bridge, I have come across many individuals doing all in their power to help the war in their small way. Last summer I met four men, three of whom were well over ninety years of age, still carrying on with their bees, producing honey which is now essential in these days of sugar shortage.

These three men have spent their lives with the bees and as their evening draws near, they have gradually dropped out of the regular work of their farms, while the bees serve to keep them occupied and keen, although they all love to tell of the crop of honey they had "away back when." They still have as lively interest in telling of the time they hived their first swarm which started their beekeeping career seventy or eighty years ago.

Three of the four men live in that part of British Columbia known as "The Sunny Okanagan"; the fourth, dean of our British Columbia old-time beekeepers is W. H. Lewis, of New Westminster. "Bill," as he is known to old and young, was born in California in '49 and although he did not take part in the Gold Rush, he likes everyone to know that he was there.

As a young man he left the land of his birth and came to Victoria where, as a journeyman printer on the staff of the Victoria Colonist, he met and married his life partner who is almost as well known to the British Columbia beekeepers as her husband. I am safe in saying that she has packed and sold as much or more honey than any woman in the province.

When the Vancouver Daily Province started on its long career as one of our leading papers, "Bill" worked on the staff that brought out the first edition. Shortly after, he left Victoria and moved into the "wilds" of Burnaby, a Vancouver suburb, where he and Mrs. Lewis cleared the land and planted one of the first commercial orchards on the lower mainland. He brought his liking for bees from his native California, and during these pioneer years he kept as many as two hundred colonies, ably assisted by his growing family of four girls and three boys. For many years he was not only a beekeeper, but made the bees keep him and to build a comfortable surplus for later life.

He retired a few years ago to his present home and when you enter his yard the first sight that meets your eye is the well kept beehives close by the house, where on fine days you are sure to find "Bill" putting around, trying to figure out some new scheme to produce more honey. In the days to come when the history of British Columbia beekeeping is written, you will find like the old poem of Abou Ben Adhem, the name of W. H. Lewis leading all the rest.

An older man than Mr. Lewis by two years is Wm. Idle, who lives with his wife and their daughter and son-in-law, W. L. McMullin, of Hulcar, near Armstrong in the North Okanagan. Mr. Idle was born on a farm in the north of England and as a boy came over to Ontario some eighty years ago. He gradually worked into farm life and at the age of twenty-one took over the apiary on his father's farm near Meadowville, Ontario, and for nearly fifty years looked after as many as one hundred fifty colonies. Mr. Idle had a great respect for and greatly admired Morley Pettit, who has been for many years one of the best known beekeepers in Canada.

Five years ago Mr. Idle and his wife came to the Okanagan Valley, where he is still keeping bees, having four colonies to play with. He also keeps an expert eye on his son-in-law's thirty-five colonies. He is now experimenting with a two pound section for home use, and, take it from me, he really has something. The last time I visited the district I found the old gentleman trying to tempt a particularly nice trout out of a shady pool and he left him to come with me with the remark, "I'll get that fellow yet."

Mr. Idle stands over six feet, and is as straight as a lodge pole pine. He has a real knowledge of bees and bee behavior, and a natural suspicion of any young whipper snapper who thinks he knows it all after a few years' experience. Like Mr. and Mrs. Lewis, he and Mrs. Idle celebrated their diamond wedding anniversary six years ago.

Within a few miles of Mr. Idle lives James Emney at Enderby. Mr. Emney came from Suffolk, England where he was born ninety years ago. He is the son of the soil too and got his start with bees in his native England at the age of twelve. He had watched one of his neighbors hiving a swarm which persisted in going back to the limb on which they had clustered in a thorny hedge. The neighbor went to lunch and young Jimmy thought he would try his hand. He did and the bees stayed. The neighbor then asked him to care for her bees, and in the fall gave him a



Wm. Lewis, just deceased, 92 years old. Typesetter in first Vancouver edition of Daily Province.

stand. When he left the old country, he had increased to twelve colonies. He settled in Ontario.

Sixty years next July his boyhood sweetheart joined him and has been his wife and helpmate ever since. Fifty years ago this Christmas, they moved onto the site of their present home on the lovely Shuswap River, between Enderby and Salmon Arm, where he proudly tells you he has eaten his Christmas dinner every year since, and has not missed one.

Mr. Emney cut his home from the virgin forest and now has one of the nicest farms in the North Okanagan. He lives in the third home built by him on the property, a stately home of logs, standing on the edge of the orchard that he and his wife planted fifty years ago. The trees are apple, pear, plum and others, not the so-called modern varieties, but still in full bearing; although the names may not be well known, the fruit is as good as any in a district that really grows good fruit.

His apiary of thirteen colonies is in a corner of the orchard and with the exception of showing signs of age, it is as modern as any in the valley. He has had as many as one hundred colonies at a time in the last forty-eight years, but now only has a few which he can look after. His sons and grandsons can look after the farm, but bees are too important to trust to the younger generation. He extracted and sold 1,500 pounds of honey this year, and naturally feels he is doing his bit.

Mr. Emney has frames in his eight frame hives that he made forty-eight years ago. He proudly tells you that the queens heading his present colonies are direct descendants from the



Fred Bettschen, 74 years old, a beekeeper, Vernon, B. C.

original pioneer stock with which he started. This point is worthy of note.

The fourth man in Okanagan, Fred Bettschen, is the baby of the crowd, as he is only seventy-five years old. He has for years been building up a business to turn it over to his son Stanley, but Stan, after seeing that his father had an able assistant in a Vernon boy, Gordon Robb, signed up with the engineers in the Canadian army, and has already been overseas and returned. He recently won his commission as a First Lieutenant and is awaiting overseas duty again. In the meantime Gordon Robb felt his country needed him also and he is now Sergeant Pilot Robb with the Royal Canadian Air Force. This left Mr. Bettschen alone with nearly two hundred fifty colonies. After the crop was harvested he spent three months in the hospital with the first sickness in his very active life. His ancestors, being sturdy Swiss mountaineers, must have transmitted some of their traditional hardihood to him, for this spring, he started in to look after two hundred fifteen colonies all alone, and with a little seasonal help in summer and again in extracting time, he harvested twenty-six thousand pounds of honey and a half a ton of beeswax.

Mr. Bettschen was born at Paisley, Ontario, and spent several years of his early life in California. He moved into Vernon in the Okanagan Valley about twenty years ago, and follows beekeeping as a full time job. He also carries on a large supply business. He aims to carry on until the boys come back when he says he is going to retire. I think however, that as long as Fred can get around, and he looks good for another twenty years,

he will take care of all the bees that he can handle.

These pioneers of the beekeeping industry in British Columbia are real men, and the experience of these four who are as up-to-date as tomorrow is a valuable asset to the coming generation with whom they are always ready to share their knowledge.

British Columbia.

— V —

HOW DISEASE IS SPREAD

In one of the past issues, the query was raised about what can be the matter with modern beekeeping which causes bee disease to increase rapidly. The answer is in the greed of the operator. Wherever the specialized beekeeper goes, disease breaks out. Sociologists claim that the struggle doesn't begin with human beings until necessity is taken out of labor. How true!

The novice will start out with a few colonies of bees and care for them, but when he succeeds for a while, he wants to plunge so that he can strut and stare while people say "there goes the largest beekeeper in the district." He will then establish outyards, over-reach himself, or increase his home yard beyond his capacity to care for it, and so disease is scattered throughout his equipment before he knows it. Then the yard dwindles back to his own mental caliber before he can get on the upgrade again.

The history of beekeeping in the Northwest has been that wherever the commercial beekeeper goes, disease is sure to follow. Many an aspiring novice has been put out of business soon after a "big" beekeeper moved a yard into a new district.

In this part of the country, it is impossible to keep bears away from bee yards. Commercial beekeepers, intent on the almighty dollar, have yards scattered here and there, and when a bear upsets a dozen colonies, and carries the combs into the brush and woods, disease is then on the rampage. I have found combs fifty yards from an outyard, and the yard itself not visited by the owner for weeks on end.

Under natural wild-life conditions, disease is transmitted through the honey, but under commercial honey producing conditions, it is spread by the interchange of combs as well as by honey.

D. S. Jacobson,
Washington.

THIS AND THAT FROM HERE AND THERE

FOR FASTER FAILURE IN BEEKEEPING

Do not protect your bees in winter. If they all die, you can get new models in the spring.

Do not use good foundation.

Don't subscribe to bee journals.

Place your apiary out in the wind. Let weeds grow over your hives. Never go through your colonies. Let the bees swarm if they want to. Let the bees take care of their own requeening.

If, after observing these rules, you have any honey to sell, don't advertise. Be independent. Let the customer find you. If you will follow these rules, you will remain in obscurity, your praises unsung the rest of your natural life, after which you will be promptly forgotten.

Alex. Kennedy,
Ohio.

— V —

ALUMINUM PAINT

Some have written that aluminum paint absorbs heat from the sun to a greater extent than white paint. This is not in keeping with the conclusions reached by those who have experimented with both kinds of paint.

One of the major paint manufacturing companies in Canada issues specifications for painting radiators, recommending a flat white paint in preference to enamels or aluminum or gold because the amount of heat passing through white flat paint is 25 per cent greater than through either aluminum or gold paint.

It is very evident as far as beehives are concerned, aluminum is a cool paint.

Frank Johns,
British Columbia.

— V —

BAD FIRE AT HUTTERIAN APIARY IN PARAGUAY

Walter Braun, of the Hutterian Fraternal Society, Primavera, Alta,

Paraguay, South America, reports in a letter, written November 12, of the loss by fire of bee house and implements, a frequent occurrence in beekeeping. In this case it was more severe than usual because the work shop and extracting plant had a foundation press, a microscope, and many valuable bee books in English, French and Spanish, difficult to replace. Hutterian brothers and others interested might help Mr. Braun in any way possible.

He says, "Our community consists of 370 people of all nations, including 170 children, of whom 24 are orphans. I remember that Dzierzon lost, almost 100 years ago, 59 colonies by fire, and he went on, so I hope to continue. I shall appreciate any help others may give me."

— V —

SOYBEAN COMPETITION

According to L. R. Stewart, of Indiana, in his talk before the Indiana Association, the effect of the present war has decreased the acreage of sweet clover by increasing the amount of soybeans as a field crop due to the demand for essential oils and plastics. Farmers get a good price for soybeans and find them more profitable than the clovers or bee pasture. This is unfortunate. The more soybeans raised, the more decrease in the various clovers, particularly sweet clover.

Although there may be a great deal of sweet clover in waste places when the sweet clover goes out of the field, it means a change in the beekeeping and in the per colony crop. Apiaries will have to be smaller and distances will have to be greater.

(By L. R. Stewart, in Indiana News Letter.)

— V —

WHAT IS MORALE?

What is morale? It is what makes the laigs do what the haid says ain't possible.

Dr. Wallace Park,
Iowa State College.

REMEMBER THIS AT SUPERING TIME

Green honey ripens faster when it is spread around in many cells than it does when there is a lot of it in a few cells.

Dr. O. W. Park,
Iowa State College.

— V —

A MOST PROFITABLE TIME TO EXAMINE FOR DISEASE

When is the best time to inspect for bee disease? I believe that fall or early winter is the best time for its eradication. The old method of late spring inspection is too late as damage has been done.

Colonies found in spring inspection, with just a few cells, are relatively harmless, and many colonies will clean up such cells, but those that go on developing foulbrood through the season until fall are the ones that are the most apt to cause damage. By the time real cool weather sets in, they will have dwindled and before long be entirely dead.

It is this sort of empty hives the inspectors find when the trouble has been broadcast and spread among other bees. Let such a hive stand until spring, and on a few nice warm days, what fun the healthy colonies may have with them. This is the mischief maker and should be removed, burned or gotten rid of.

G. L. Hankammer,
Illinois.

— V —

EXTRA BEESWAX

Considering the production of extra beeswax, I have gone over my entire yard and reversed the inside cover board of my colonies which resulted in the bees building burr combs under each board. The bees build along a space about four inches wide especially in the center, and I remove these burrs whenever I can, thus adding considerably to the amount of wax I am able to obtain each year from each colony.

Alfred H. Pering,
Florida.

ECKERT OFFER

Readers will no doubt remember the article by J. E. Eckert, of California, last June, to pay \$100 for a resistant queen which would produce daughters which would actually prove to be resistant to American foulbrood under California conditions. This brings to mind a number of things.

The majority of beekeepers are vitally interested in the development of disease resistant strains of bees, but naturally their acceptance of them will have to be in the nature of experiments for a time. This trial experience is important to the breeder as furnishing a modest market which in turn will provide funds to continue developments. It is even more important to the industry as different results will be obtained under varying climatic and pasture condition. The collective experience will be of great value.

To a casual reader, and to the ordinary beekeeper, Mr. Eckert's article would seem to discourage the purchase of such strains, thus preventing further development except by government or university departments. This is a grave mistake and appears to have been created quite largely by a misunderstanding of words. Mr. Eckert is in search of a "disease proof" queen, whereas all discussions so far have been of "disease resistant" queens. The article admits some resistance, but further selection should increase the resistance so that it is capable of keeping disease completely out of the hive.

The jolts of direct infection by foulbrood does not seem to be reasonable as nothing but a "disease proof" colony would be able to withstand it. It might have been a much better test to have introduced disease carrying bees or feeding moderate amounts of infected honey, increasing the dose as resistance was proven, a method followed in animals and other insects in biological studies.

Leslie Franks,
Illinois.

— V —

IN THE FAR NORTH

My family of ten, excepting the two youngest, are out in the world on their own, leaving me with leisure for beekeeping as a hobby. I doubt if you have any subscribers this far north on the Pacific coast.

From my kitchen table, I can see the mountains of Alaska. I keep my two colonies in Kootenay cases because due to the wet climate and variations of temperature, I doubt if they could be kept in ordinary hives. The bees depend mostly on wild

plants, some Dutch clover, and patches of dandelions. The honey has a wild flavor, is of a golden yellow color, is quite thick and never seems to granulate. The bees show little tendency to swarm and do not raise many drones.

The summer days are long with the nights not dark, but just a twilight. The bees fly from five in the morning until nine at night.

Mrs. Vesta H. Deane,
British Columbia.

— V —

HONEYBEES IN POLLINATION

Factors Affecting the Usefulness of Honeybees in Pollination, by George H. Vansell, of Davis, California, is the title of United States Department of Agriculture Bulletin No. 650.

Reading this bulletin has been a real treat to me because "I was there." Here is no "hasty, ill-considered publication," but quite the contrary because much of the data was gathered in 1931-32-33 while I was at Davis, working with Vansell. He further checked and amplified the data by more work in California and Oregon, until ten years later, in September 1942, a summary of the work was published.

I can testify that gathering the data required an immense amount of time and infinite patience which is characteristic of the work of Vansell.

Better get the bulletin and read it. It is of much interest that, in 16 colonies with an average population of 18,000 bees per colony, one day's flight in time of fruit bloom, totaled more than three-quarter of a million bees.

Vansell states that one bee visited 84 Bartlett pear blossoms to get a load of pollen. Multiply 822,720 flights by 84 and you can guess what kind of a crop of pears Mr. Caldwell had from the orchard in which the bees were located. With bees only a mile away, the set of pears is likely to be small in that mountain area.

If you doubt the figures, go and count bees yourself! I helped count them and can tell you it is no small feat to follow the same bee while it visits 84 different pear blossoms. Neither is it easy to count, accurately, 100 bees coming into the hive in thirty seconds. I've tried it, but as a duck swims, "Van" does such things.

E. L. Sechrist.

— V —

STYLISH

Honey must be kept in style to glide into the shopper's basket.

Mrs. Harriett M. Grace,
Director,
American Honey Institute.

OH MY—SO IT IS!

Referring to our item "So It Is!" in the November issue, where we quote from The Western Canadian Beekeeper, which says that beekeepers as a class are unappreciative, one subscriber Lyn. R. Schuler of Washington, D. C. writes: "Well, whose fault is it? 'Not mine,' said the little red fox. 'Not mine,' said the green goose. Nobody wants to take the blame. Nevertheless, here is a suggestion.

"I subscribe to two magazines and belong to the Virginia Beekeepers' Association. This on top of all the other monthly or yearly expenses is just simply too much for the average beekeeper because do we get \$3.00 a year out of it?

"Now if Gleanings in Bee Culture and the American Bee Journal would combine and put out an honest to goodness red hot magazine with the subscription price of 50 cents a year, three years for \$1.00, then we would get somewhere. How can we sell this big new magazine at 50 cents a year? Well, how did the Saturday Evening Post sell for a nickel? Five cents doesn't begin to pay for the paper, but if you combine, then you could get more for your advertising. We would have a magazine with a real zing in it that would make a fellow just go round with his tongue out a foot until the next issue came out.

Sincerely,
Lyn R. Schuler,
Washington, D. C."

[Probably true that in the two magazines mentioned 90 per cent of the subscription list is a duplication. That is, probably 90 per cent of our readers read Gleanings and the opposite is true. Mr. Schuler's suggestion is perhaps basically worth while but we doubt that if Deyell and Cale didn't each try to beat the other every month, neither magazine would be as good as it is. It takes competition to make the wheels go around.—Ed.]

— V —

BEESWAX AND HONEY NOT PROCESSED

It would be a good thing to let the Office of Price Administration know that beeswax and pollen are agricultural products and are not processed. Honey also is an agricultural product, unless it has been filtered so that its natural characteristics are changed.

E. L. Sechrist,
California.



1



2



3

I—DRIVING BEES

Here is a picture which may be of interest to readers. It shows my wife driving bees of which we do quite an amount each fall. It shows our method of driving the bees directly into the hive.

Harold Teal,
England.

— V —

2—VENTILATION

Edwin Goff, of Michigan, sends this view of Ross Wyant's apiary, with hives ventilated in hot weather. We set the inner cover back so there is a space at the front edge of the supers; then set the top cover over, as Wyant has done, to protect the open space and yet permit air to come in freely.

— V —

3—PEASE HOME IN TEXAS

Harry A. Pease, formerly associated with the Dadant cooperative apiaries at Glenwood, Iowa, now keeps bees in southern Minnesota. When the season is through and the strongest colonies put away for winter, he migrates to the South where at Mission, Texas, he has this nice brick house while those of us not so fortunate, shovel coal. Here he can make nuclei to fill the northern empties and so stretch his beekeeping year out almost to a full time occupation.

— V —

A POET KNEW BIRD'S-FOOT TREFOIL

One of the Honey Plant Garden plots is planted to bird's-foot trefoil. We have mentioned this possible honey plant a number of times.

An interesting comment about it comes from United States Department of Agriculture release under the above title.

"A Corn Belt farm editor recently in Washington viewed certain areas of Iowa as being adapted to the growing of bird's-foot trefoil. His interest in the subject has been aroused by the reported experience of a number of New York State farmers who have grown it for seed and grazing. Originally, seed of this acid-tolerant perennial hardy legume probably came from western Europe. George Meredith, English poet and novelist, who died at the age of 81 in 1909, in one of his best-known poems alludes to 'grass-glades yellow with bird's-foot trefoil.' "

SWARM PREVENTION

(Continued from page 194)

4. Suitable ventilation should be provided with an entrance to the hive at least $\frac{1}{8}$ inch deep by the full width of the hive, and a small opening at or near the top. Hives should be shaded from the hot sun.

5. Sufficient room for the expansion of brood and for storage of honey is important.

6. Removal of the excess of young bees and the emerging brood from the combs to be occupied by the queen. It is generally conceded that a congestion of the brood nest by a large number of young and emerging bees is the prime cause of swarming. The removal of this excess from the proximity of the queen is a most potent cure for the swarming fever, and it is not affected by merely providing a large brood chamber. In nature, it is brought about by swarming and it may be affected artificially by means of shook swarming, either of which divides colony strength. In the production of extracted honey, such separation may be accomplished by manipulation which I will attempt to describe, a procedure which not only removes the excess brood from the vicinity of the queen, but also retains within the hive the full force of bees for the production of honey, resulting in rousing big colonies with plenty of room for storage and plenty of room for brood expansion.

In our production of extracted honey, two-story, standard 10-frame hives are used summer and winter, with adequate top and bottom ventilation. Except in winter, the queens are confined to the lower story by means of queen excluders, the second story serving as a food chamber. Colonies are requeened every two years or oftener, young queens being reared in nuclei from cells grafted from our best and most productive colonies that do not start queen cells or attempt to swarm. Swarm cells are discarded always, for if they are used, they only increase the swarming propensity.

In the brood chamber, I use only perfect or nearly perfect combs with few drone cells and drawn entirely down to the bottom bar. Such combs can best be provided by having them drawn out above the food chamber from full sheets of wired foundation. It is difficult to secure even fairly good combs built in the lower story, especially when the brood is placed above.

Late in April, before the opening of fruit bloom, combs are examined to make sure that every colony is in prime condition and that each hive has plenty of food to carry it through to the main honey-flow. The clipped queens are then

confined to the lower story and supers added if necessary.

At the beginning of the main clover flow, which here is about first week in June, all brood except one comb is raised to the third or the top story, and replaced below by empty drawn combs (not foundation) and, with the exception perhaps of a weak colony, the whole yard is treated at the same time **before swarm cells are started**. This eliminates the necessity for any further manipulation for at least three weeks except that queen cells in the top story may be destroyed ten days after setting the brood up, an operation often unnecessary. The beekeeper who waits until swarm cells are started before manipulating has missed a most important point in the whole procedure. He is simply following the old and useless practice of hunting queen cells, a pastime dispensed with by this method.

When the brood nest again becomes congested, the operation is repeated if conditions warrant, the brood being placed at the top of the now four or five story hive, after which no further manipulation is necessary for the rest of the season.

With this systematic method, an efficient operator should be able to care for at least four hundred colonies through the swarming season. Being an octogenarian, my beekeeping is now restricted to a single yard of seventy-five colonies taking only a part of my time, since I have other work. I need only help in extracting.

There are other plans for swarm control, the most popular being the double brood chamber. One objection to the large hive or the double brood chamber is that it is not wholly effective of swarm prevention. Another is that it nearly always results in defective combs as the bees are prone to gnaw away unoccupied combs in the lower part of the hive whenever there is a dearth of nectar.

For swarm control in the production of comb honey, the operation is the same as has been described for extracted honey until about the time for the beginning of the main honey-flow. Then the excluder and the lower section of the hive are removed, and the second story or food chamber is set down on the bottom board to serve as a new brood chamber. Two or more comb honey supers are added and the bees shaken in front. Since the new brood nest contains no larvae from which queen cells can be started, there can be no swarming for several days at least, and usually there is none for the rest of the season if plenty of super room is provided. The queen starts laying at once and any new honey coming in is carried into the supers provided the colony is strong. The beeless brood is used

to strengthen a weak colony or to build up nuclei. This is a modification of a plan advocated by Doolittle about thirty-five years ago.

Indiana.

— V —



LET'S HOPE HE CAN CARRY CANS FOR YEARS

With the urgent need of tins for bulk honey containers, we hope that this young man can carry a honey can on his shoulder every year without having to look around for something else to put the honey in. Such a small amount of tin is used for honey containers that if the stock pile now available were used for honey alone, it would last the beekeepers, for all purposes, 1500 years. We hope that, as important as honey is, the availability of tin cans will not be disturbed for the beekeeper.

— V —

OUR COVER PICTURE

Our cover picture this month was taken by Paul Hadley, Piggott, Arkansas, that versatile camera man who furnishes many illustrations. The flower is the flowering dogwood, a true "glory of the forest," blooming in early spring before the rest of the tree have leafed out. It blooms in early April in Arkansas and Missouri, and in early May for Pennsylvania and Virginia.



Dr. A. L. Gregory, San Pedro Sula, with exhibit of honey produced in Honduras.



View at Tegucigalpa, capital of Honduras (Photo from Pan American Union, Washington, D. C.)



Presidential Palace at Tegucigalpa (Photo from Feliz Camales Salazar, through Pan American Union.)

HONDURAS

It was Don Ramon Anguiano, Spain's governor of the Province of Honduras, who wrote to his king that in Honduras one could see "the largest banana in the world and the tallest corn plant." In addition to a lavish agricultural endowment, the Spaniards found in Honduras one of the principal seats of the unsurpassed Maya culture. The influence of the Maya and other aboriginal peoples is still visible especially in the interior where Indian strains have united with the Spaniards to form new racial blends, believed to hold great promise for the future of this country.

Honduras has a fairly homogeneous population of almost 1,000,000 people, but they are widely scattered over 44,800 square miles, an area a little larger than Virginia. About 105,000 families live in rural sections, compared with the 50,000 families that inhabit the towns.

The interior is fairly dry and the climate usually mild, with a mean temperature of around 70°. In the hot coastal regions, 90° is the average. The year is divided into the dry summer period from November to March and the wet season from April to October.

Honduras is a land of many lakes, rivers and mountain peaks, some attaining a height of 8,000 feet, giving the country a variety of climate, a delightful and picturesque setting. Honduras has more sea ports on the northern or Atlantic coast than any other Central American republic.

There are two distinct zones, the northern centering at San Pedro Sula, served by the Atlantic ports and the southern, of which the capital city, Tegucigalpa is the center. The north shore ports are only three days from New Orleans. Airplane routes bring the capital of Honduras to within thirty-six hours of the United States.

The chief export is the banana. It is also a land rich in minerals. Among the agricultural products are coffee, tobacco, cocoanuts, hides, sarsaparilla and citrus fruits. In the forests are thousands of acres of mahogany and other woods like pine, oak, cedar, white poplar, beech, quebracho and Brazil wood.

Education has steadily progressed. There are over 530 primary schools in the towns and 240 in rural districts with 25 normal and secondary schools and professional schools. Three agricultural schools operate under private auspices and plans have been elaborated for a school of tropical agriculture to be financed in the United States.

(From an article "Honduras Makes Progress," by Philip Leonard Green, through Pan American Union.)

DEPARTMENTS



Leaves, fruit, and flower of the East Indian Kapok, at the Lancetilla Experiment Station, Tela, Honduras. (Print from Pan American Union, from photo by R. Stadelman.)



RECIPES



COOKIES MADE WITH HONEY AT HIGH ALTITUDES

By EMMA J. THIESSEN,
University of Wyoming Agricultural
Experimental Station

HONEY may be used very successfully in cooky recipes at high altitudes. It is hygroscopic and has the ability to absorb and retain moisture, thereby preventing cookies from drying out so quickly as with sugar. This quality is of value in high altitude areas which are often semi-arid.

Special recipes must be used for both cakes and cookies at high altitudes where many of the excellent low-altitude recipes found in standard cook books or in magazines result in failures, due to the fact that the pressure of the atmosphere is much less than at sea-level.

A general rule for successful modifications of sea-level formulas cannot be stated since different recipes vary considerably in the amounts of leavening, fat, and sugar. It is often necessary that amounts of these three ingredients be reduced for a good product at high altitudes.

At the request of Wyoming homemakers the home economics research department of the University of Wyoming have developed formulas for cookies and cakes with honey which have been used successfully at altitudes ranging from 4500 to 7500 feet.

From this experimental testing, it was evident that honey could best be used in combination with sugar, and combined with the creamed fat by hard beating using either a mechanical mixer, rotary egg beater or spoon. To hold the emulsion, some flour was added before the addition of the whole eggs or liquid. With a large proportion of honey, a soggy layer was occasionally formed in the product which could be prevented by using this method of mixing.

The baking temperature for honey cookies was reduced slightly from that used for ordinary sugar cookies to prevent them from becoming too brown. In substituting all-purpose flour for the pastry flour, the amount was lessened approximately two table-

spoons per cup. An exact amount of hard wheat flour cannot be specified since different brands vary considerably in absorption power. The dough with either flour, for a rolled cooky should be of a soft consistency. The flour was sifted once before measuring.

Through the American Bee Journal, these high altitude recipes are gladly shared with other homemakers in mountainous regions.

— V —

Rolled Honey Cookies

$\frac{1}{4}$ cup sugar
6 tablespoons fat
 $\frac{1}{4}$ cup honey
1 small egg
1 teaspoon baking powder
2 cups plus 2 tablespoons pastry flour
 $\frac{1}{4}$ teaspoon salt
 $\frac{1}{4}$ teaspoon vanilla
 $\frac{1}{4}$ cup chopped nuts

Cream butter; add sugar and cream thoroughly. Add honey small amount at a time and beat well. Add beaten egg and vanilla and mix well. Add the sifted dry ingredients, being careful not to overmix. Chill thirty minutes. May be conveniently rolled between two layers of waxed paper. Flour waxed paper lightly, place ball of lightly floured dough between waxed paper and roll. Remove the top paper, cut into desired shape. Nuts may be sprinkled over the top. Bake at 350° F. for about 10 minutes or until brown.

— V —

Swedish Spritz with Honey

10 tablespoons butter
 $\frac{1}{4}$ cup sugar
 $\frac{1}{4}$ cup honey
1 egg yolk
 $\frac{1}{4}$ teaspoon almond
 $\frac{1}{4}$ teaspoon vanilla
 $\frac{1}{4}$ teaspoon salt
2 cups pastry flour or enough for soft dough
 $\frac{1}{4}$ teaspoon baking powder

Cream butter and sugar; beat in honey and egg yolk. Add extracts. Sift flour, baking powder and salt and

add in four additions. Let dough stand in covered bowl 20 minutes. Use cooky press. Shape as "S" or in other fancy designs. Bake at 375° F. for about 10 minutes. Makes about 4 dozen small cookies.

— V —

Peanut Butter Drop Cookies with Honey

5 tablespoons shortening
 $\frac{1}{4}$ cup sugar
 $\frac{1}{2}$ cup honey
2/3 cup (scant) peanut butter
2 small eggs or 4 yolks
1 1/3 cups pastry flour
 $\frac{1}{4}$ teaspoon baking powder
 $\frac{1}{2}$ teaspoon salt

Cream fat, add sugar, and mix until light and fluffy. Beat in honey and peanut butter. Add beaten eggs. Add flour which has been sifted with baking powder and salt. Drop from teaspoon on well-greased cooky sheet. Bake at 340° F. for about 15 or 20 minutes. Cool slightly before removing from cooky sheet.

— V —

Refrigerator Date Pin Wheels with Honey

$\frac{1}{2}$ cup honey
6 tablespoons brown sugar
 $\frac{1}{2}$ cup fat
2 eggs (small)
 $\frac{1}{4}$ teaspoon salt
 $\frac{1}{4}$ teaspoon soda
3 cups pastry flour or enough for soft dough

Cream fat with brown sugar, freed from lumps. Beat in honey gradually. Sift flour, soda and salt. Add about $\frac{1}{4}$ of the flour, then eggs one at a time. Add rest of flour in about four additions. Do not over-mix. Chill. Divide dough into fourths. Flour, roll between two layers of floured waxed paper and spread dough with date filling. Roll like jelly roll, wrap in waxed paper and put in refrigerator until very cold. May be kept a week or a few hours before using. Slice and bake at 350° F. for 10-20 minutes or until done. Makes about 5 dozen.

— V —

Filling

$\frac{1}{2}$ cup dates chopped fine
 $\frac{1}{4}$ cup honey
2 tablespoons water
 $\frac{1}{4}$ teaspoon salt
2 tablespoons lemon juice
1/3 cup chopped nuts may be added

Combine all ingredients except nuts, cook at low heat until consistency to spread, add nuts. Chill thoroughly before spreading on cooky dough.



AMERICAN HONEY INSTITUTE

Do you remember the first pennies you had that were your very own? Do you remember how you went to the store and looked in the glass case on the counter to see the kind of candy that came in the biggest pieces and how you studied to see how to get the most for your money?

We are doing just that same thing today except that we have both pennies and points to try to get the most for.

Very scarce items carry a high value in ration points while less scarce items carry a low value in ration points.

One man tells us that he will never forget the first nickel he earned. He mowed a lawn so large that it took him an entire afternoon. He went to the grocery store to spend the nickel and his eyes lighted on a beautiful comb of honey for five cents. He ate every bit of it.

Many of the war time measures—walking—natural foods—gardening—a hive or two of bees—no overheated rooms—recreation in the home—are really good for our health.

— V —

The full page advertisement of General Mills on the back page of the Saturday Evening Post of April 10 includes Honey Butter in the Sunday breakfast menu.

— V —

The National Biscuit Company in the April 17th issue of Saturday Evening Post advertises a delicious "Golden Fizz" in a half-page colorful advertisement. "Golden Fizz" calls for orange juice, ginger ale, and honey.

— V —

Now is the time to stress the uses of Honey Butter. Have you tried this recipe for a nutritious butter extender?

1/2 cup butter
2/3 cup honey
1/3 cup heavy cream, whipped

Cream butter until very soft. Add honey gradually, beating well while adding. Fold in whipped cream and store in refrigerator. Allow to come to room temperature, and cream again before using.

— V —

The American Meat Institute in its "Share the Meat Special" suggests Braised Pork Shanks prepared tenderly and served with sweet potatoes

topped with Honey Butter. The recipe for pork shanks follows:

4 pork shanks
Water
Seasonings
Flour

Cover shanks with boiling water. Simmer for about 1 1/2 hours. Drain and remove skin from shanks. Dredge shanks in seasoned flour and brown in hot kettle. Add 2 cups of water, cover and simmer for 2 hours or until tender. Add water as needed. Serves four.

— V —

Crisco has a full-page advertisement in the Journal of Home Economics. The chief part of it plays up a honey nut cake.

— V —

Peanut butter and honey have always gone well together. The latest release on Food and Nutrition Ideas features the following recipe that you may want to try when you use sweet potatoes.

— V —

Peanut-Potato Ring

3 cups steamed sweet potatoes
1 teaspoon salt
1/4—1/2 cup milk
1/2 cup peanut butter
1/4 cup honey
2 tablespoons butter or margarine

Boil potatoes in salted water until tender. Drain, peel and mash. Add hot milk and beat until light. Butter ring mold or pan. Mix honey and peanut butter. Spread in bottom of mold or pan. Fill with mashed potatoes. Bake 30 to 40 minutes in a 350°-375° F. oven. Serve with glazed side up. Garnish with prunes stuffed with peanut butter.

— V —

The April issue of American Cookery has the recipe for "April Delight" that appeared in the April issue of bee journals with the good suggestion that it be moulded in paper cups.

— V —

Nutrition classes throughout the country are using "Old Favorite Honey Recipes."

— V —

The Institute has been given time for broadcasts on Honey on WHA-WLBL on May 19 and June 8. The broadcast on June 8 will be on honey in early canning.

Bees and Queens

WRITE FOR CIRCULAR

Wicht Apiaries

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Oldest and largest Milk Goat magazine published. Broadest circulation. Articles by best authorities. Subscription rate: one year \$2.00; three years \$4.00; five years \$6.00.

Sample copy 20 cents

Address:

The Goat World, Vincennes, Ind.

Why not book your order now for
HOMAN'S

3-Banded Italian Bees & Queens

	1-24	25-49	50-499
2-Lb. with queen	\$2.85	\$2.60	\$2.50
3-Lb. with queen	3.75	3.60	3.50
Queens	.85	.80	.75

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SHANNON, MISSISSIPPI

Australian Beekeeping News

The Leading Bee Journal of the
Southern Hemisphere is the

"Australasian Beekeeper"

Subscription 5 shillings per year, start any time. Enquire for International money order for 5 shillings (Australian) at your Post Office. Write now to The Editor, P. O. Box 20, West Maitland, New South Wales, Australia

The BEST PACKAGE

to be had. About 75% baby bees,
25% teachers.

A good Italian queen raised right.

We try to make you money.
The VICTOR APIARIES, West Columbia, Tex.

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BRIGHT YELLOW AND THREE
BAND QUEENS

GRAYDON BROS.

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Canadian Bee Journal

Canadian beekeepers too have wartime problems. If you are interested in bee activities "North of the Border," send us your subscription NOW. We will see that you receive each monthly copy regularly.

Each issue contains timely articles of value to beekeepers everywhere, and News and Views from Coast to Coast.

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OSHAWA, ONTARIO

Renew your subscription today!
You don't want to miss an issue.

PALMETTO QUALITY QUEENS

Prices as follows: 1 to 10 Queens 30c each. More than 10 Queens 75c each. Prices after June 1st, 80c each. Satisfaction and a square deal assured when you buy our queens.

C. G. ELLISON
BELTON, S. C.

Mr. Honey Producer

Join a progressive cooperative now and safeguard your future market. We need the honey at ceiling prices. You need us to safeguard the time when selling is hard. Join now.

For particulars write

Illinois Honey Producers Assn.
MT. STERLING, ILLINOIS

HELLO FOLKS!

HERE WE ARE AGAIN
STEVENSON'S LINE-BRED GOLDENS

To thank you and to tell you we are booked to June 1st.

Queens 90 Cents. 2-Lb. package with queen \$2.95. 3-Lb. \$3.80.

STEVENSON'S APIARIES Westwego, Louisiana

Improved Quality Italians

That will stand the test for honey gatherers—Gentle, Prolific. Full weight live delivery guaranteed.

	2-Lb.	3-Lb.	4-Lb.	5-Lb.
Pkg.	\$2.80	\$3.70	\$4.55	\$5.50
1- 25				
26-100	2.70	3.55	4.40	5.05

All packages with young queens

Untested queens 85c delivered

FLOWERS BEE COMPANY
JESUP, GEORGIA

DOMESTICATED EARTHWORMS

Propagate earthworms for better soil. Learn how to quickly build fine, fertile topsoil for garden, nursery, orchard or farm. Earthworms rapidly convert all vegetable and animal waste into valuable plant food and humus. My complete production manual tells how. Prepaid, \$1.00, with 30 day return privilege. "EARTHWORMS: Their Intensive Propagation and Use in Biological Soil building." Order today, or write for information.

Dr. Thomas J. Barrett, Box B5, Roscoe, California

Caucasian Bees & Queens

Booked up with orders until last half of May and later. Thanks again for sending us your business. Sorry we can't take care of all orders coming to us.

Bolling Bee Co.
Bolling, Ala.

The BEEKEEPERS ITEM

The Southern beekeepers, own magazine, but read by studious honey producers everywhere. Send \$1.75 and get Both Magazines for a year BEEKEEPERS ITEM, San Antonio, Texas

For honey's sake, join your nearest Association of Beekeepers.



With the American Bee Journal makes a combination that covers the beekeeping field.

Bronx County (N. Y.) Association
May 9th

The Bronx County Association will hold its regular monthly meeting at the home and apiaries of Mrs. A. F. Bowen, 1336 Balcom Ave., Sunday, May 9th, 2:30 P. M. Officers for the coming year will be elected. Also we will have the privilege of looking over the colonies of our hostess, and helping with the introduction of package bees. A cordial welcome is extended to you and your friends. Refreshments will be served. The meeting is free.

Harry Newman, Sec'y.

HONDURAS

(Continued from page 204)

in "Agriculture in the Americas," October, 1942.)

The following by Dr. A. L. Gregory of San Pedro Sula, tells about bee-keeping:

"Honduras has a tropical climate so its people have never seen frost or even snow. The writer has been in Brazil, California and Honduras. In Honduras, the honey is collected in February, March and April. In the San Pedro Sula district, it is very fine with an agreeable flavor.

Beekeeping is just about voting age. Some twenty-one years ago a German made a trip to New Orleans and brought back a colony with an extra queen. The colony arrived safely, but in the thirty miles carrying to San Pedro Sula, the combs all melted down, so he came to his destination with a dead queen and also a good portion of the workers. By piecing the broken combs together and giving the bees his extra queen, he got a nucleus at a cost of around \$200, including the price of his ticket.

We have about fifty colonies at present. We are actively interested in furthering agriculture in Honduras and we are trying to interest the natives to take up this line of agriculture. At present, most of the beekeepers are Germans or Americans. I can recall only two Hondurians who have anything like a decent apiary. There is one Italian and one Hungarian.

Our only cultivated honey sources are oranges and lemons, the rest are

native trees and weeds, but the greater part of the year we have some trees, shrubs, vines or plants producing nectar, so there is enough for the bees to live on. The grand harvest begins the last of January or the first of February.

We are told there are places in the interior where honey bearing flowers live in great abundance, but we have not seen these conditions for ourselves. Here on the north coast our year is unevenly divided into the wet and dry seasons, the principal rains occurring in November and December and into January, followed at once by dry weather lasting into June. During this period the rains are seldom. From June on, there are spells of rain which increase in length toward the end of the year, with a short dry spell around October. Our principal harvest comes in the early part of the year, with a small one about October.

You who live in countries where you have winter do not imagine how we enjoy life in the tropics where we never have a frost and do not have to pack bees and don't need a bee cellar, but we have moths and ants to contend with in great numbers. My wife and I attend to our seventy colonies, although I am seventy and my wife sixty.

Many of the natives think honey is a medicine, but when Mr. Average Citizen learns that honey is one of the fine foods, we will have little to worry about our markets, although, so far we have not been able to satisfy local trade. We sell our honey mostly in white quart bottle labeled and wrapped in cellophane paper, at fifty cents for one bottle or three bottles for a dollar.

— V —



Meetings & Events

Mrs. Bremer Resigns

It is with regret that I announce the resignation of Mrs. E. H. Bremer, as president of the Auxiliary, and the resignation of Mrs. John Kirschbaum as secretary-treasurer.

Since the writer is vice-president, I will finish Mrs. Bremer's term of office. I have appointed Mrs. Reva Todd, Des Moines, Iowa, to fill the office of secretary-treasurer for the unexpired term of Mrs. Kirschbaum.

Mrs. Todd and I hope the ladies will feel free to make suggestions or comments at any time. Our aim is to keep the organization together and

strengthen it as much as we can during this time of war.

Mrs. Millard Coggshall,
Vice-President,
National Beekeepers' Aux.,
Clermont, Florida.

— V —

**New Rochelle Association (N. Y.)
May 3**

The New Rochelle Association will hold its regular monthly meeting at the Coronet Tea Room, 16 Lockwood Avenue, New Rochelle, New York, Monday, May 3, at 8:00 P. M. Harry Newman, commercial artist and lecturer, will give a blackboard demonstration of flowers visited by the bees. Also moving pictures of bees and their habits. A most cordial invitation is extended to all beekeepers and all those interested in bees, especially from Westchester County. Refreshments will be served.

S. Barnes, Publicity.

— V —

Short Course Ames, Iowa, May 6-7

Don't forget the beekeeping short course at the Iowa State College, Ames, Iowa, May 6 and 7. The first day will be devoted to the problems of the beginner and the second day the problems of the commercial producer. Prof. George Rea, formerly of Cornell University, Ithaca, New York, will be the guest speaker.

A feature of the second day program will be on marketing by representatives of the honey packing industry. This should prove especially valuable.

Prof. F. B. Paddock,
Ames, Iowa.

— V —

Cuyahoga County (Ohio) Beekeepers' Association, May 16.

Our Sunday afternoon bee yard meeting will be held in Julius Schenk's (Please turn to page 211)

**SELL US YOUR
HONEY NOW... AND
SAFEGUARD YOUR
FUTURE SALES**

JENSEN'S Package Bees and Queens

We are completely booked up through May. May have some packages in June, and will run the queen yards to capacity right on through, so better book your orders well in advance to be sure of getting them. We sincerely regret having to disappoint so many of you by returning your orders, and hope you were able to get your bees elsewhere this time.

	Prices:	2-Lb. Pkgs. with Queens	3-Lb. Pkgs. with Queens
Queens			
1- 24 -----	\$.90	\$ 2.95	\$ 3.80
25-100 -----	.85	2.80	3.60
Units of 100 -----	.80		

Jensen's Apiaries : Macon, Miss.

The Home of "Magnolia State" Strain Italians

York's Package Bees & Queens

Quality Bred Italians

Booked to full capacity on package bees and queens to June 1st. Orders requesting earlier shipping will have to be returned unfilled. We regret this but the demand is far greater than ever and we can only accept orders now for June and later shipping.

QUEENS AND PACKAGE BEES WITH QUEENS

Quantity	1 to 24	25 up
Queens	\$.90 each	\$.85 each
2-Lb. Packages	2.95 each	2.80 each
3-Lb. Packages	3.80 each	3.60 each

Queens by air mail, add 5 cents per queen. Queens clipped, add 25 cents per queen. Queenless packages, deduct price of queen. Yours for full weights quality bees, young queens and satisfaction.

York Bee Company, Jesup, Ga., U.S.A.

The Universal Apiaries

American Bee Journal Classified Ads Bring Satisfactory Results

● Here is an opportunity to establish permanent connections with one of America's largest honey merchants. Sell us your honey now, all of it, in carload lots. (Smaller amounts accepted from nearby points.) We pay top ceiling prices. We also want your beeswax. For this we pay \$41 $\frac{1}{2}$ for clean, pure, yellow wax. All prices effective at shipping points. Send your samples at once. Cans returned in accordance with OPA order No. 275, if desired.

THE JOHN G. PATON COMPANY, INC., 630 Fifth Avenue, New York, N.Y.



Bee Smokers and Bee Veils

By diverting material allowances to these two indispensable items early in the season, we have been able to supply them in normal quantities.

On March 6th, the WPB authorized increased production on Extractors and some other metal bee supplies, from 38% to 100%, as of 1940-41. At this late date, with the difficulty in securing materials and the labor shortage, the situation will not be much improved, in time for the 1943 crop.

The bulk of all bee supplies are bought and honey gathered during the first six months of the year. Even under normal conditions, the manufacturer must plan his production from six to ten months in advance of the active season.

A. G. WOODMAN CO., Grand Rapids, Michigan

We want to thank our good friends and customers for the business given us this year

We were booked to capacity to May 20th before the shipping season started. We can now accept orders for shipment after May 20th only. We want to again urge you to let us have your order early to secure the shipping date you desire.

Three-Banded Italian Bees & Queens

PRICES AFTER MAY 20TH

Quantity	Queens	2-Lb. pkg.	3-Lb pkg.	4-Lb. pkg.
1 to 24	\$.75	\$2.80	\$3.70	\$4.45
25 to 99	.70	2.65	3.50	4.20
100 to 499	.65	2.50	3.30	3.95

BEST YOUNG QUEENS SAFE ARRIVAL ALL NEW CAGES

HOLDER APIARIES

65 ST. FRANCIS ST. BOX 1101 MOBILE, ALABAMA

Stock Bred For Resistance

A WORD TO THE WISE—Better use this stock when it can be obtained to carry forward your Victory Campaign for disease control.

The demand for these queens can be supplied if it can be spread throughout the season. Why not order for weekly deliveries to meet your needs of the season? Why not use the nucleus method of queen reservoir and introduction to meet colony demands?

For prices see page 79, February issue of the American Bee Journal or write to

IOWA BEEKEEPERS' ASSOCIATION

STATE HOUSE

DES MOINES, IOWA

Quality Bred Three Banded Italian Bees and Queens

Customers—With my lifetime experience in rearing queens and shipping package bees you can't find anyone who will serve you better than I can.

Prices on Queens and Package Bees with Queens			
Lots of	Queens	2-Lb. Pkgs.	3-Lb. Pkgs.
1 to 24	\$.85	\$2.85	\$3.75
25 to 49	.80	2.60	3.60
50 to 500	.75	2.50	3.50

FARRIS HOMAN : SHANNON, MISS.

Carniolan Bees

We are booked on bees for MAY. Will accept queen orders at \$1.00 each postpaid.

EPHARDT'S HONEY FARM

Plaucheville, Louisiana

STATEMENT OF THE OWNERSHIP
MANAGEMENT, CIRCULATION, ETC., RE-
QUIRED BY THE ACTS OF CONGRESS
OF AUGUST 24, 1912 AND MARCH 3,
1933.

Of American Bee Journal, published monthly
at Hamilton, Illinois, May 1, 1943
STATE OF ILLINOIS, } ss.
County of Hancock, } ss.

Before me, a notary public in and for the state and county aforesaid, personally appeared M. G. Dadant, who, having been duly sworn according to law, deposes and says that he is the business manager of the American Bee Journal and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the name and addresses of the publishers, editors, and business managers are:

Publishers: American Bee Journal, Hamilton, Ill.

Editors: G. H. Cale, Hamilton, Ill., Frank Pellett, Hamilton, Ill., M. G. Dadant, Hamilton, Ill.

Business Managers: M. G. Dadant, Hamilton, Ill., J. C. Dadant, Hamilton, Ill.

2. That the owners are:
H. C. Dadant, Hamilton, Ill.
J. C. Dadant, Hamilton, Ill.
V. M. Dadant, Hamilton, Ill.
M. G. Dadant, Hamilton, Ill.
C. S. Dadant, Hamilton, Ill.
R. A. Grout, Hamilton, Ill.
L. C. Dadant, Hamilton, Ill.
R. H. Dadant, Hamilton, Ill.
Louisa G. Saugier, Hamilton, Ill.

3. That the known bondholders, mortgagees and other security holders owning or holding one per cent or more of the total amount of bonds, mortgages, or other securities are: None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

(Signed) M. G. DADANT,
Business Manager American Bee Journal.

Sworn to and subscribed before me this 10th day of April, 1943.

MINNIE S. KING, Notary Public
My commission expires Nov. 18 1945.

HONEY WANTED COMB AND EXTRACTED

LAWRENCE FRUIT COMPANY

Commission Merchants

71 South Water Market, Chicago, Illinois
Est. 1928. References: Central National
Bank in Chicago.

MEETINGS AND EVENTS

(Continued from page 209)

apiary, 19101 Nottingham Road, Euclid, on May 16. Take "St. Clair—Nottingham" street car to the end of the line. Don't forget your bee veil. In the event of rain the meeting will be held on the following Sunday afternoon.

Ed Johnson,
Secretary.

— V —

State Beekeepers' Associations Vote to Federate

Join National Federation of State Beekeepers' Associations.

To Pennsylvania State Beekeepers' Association goes the honor of being the first association to vote to join the National Federation of State Beekeepers' Association, such action being reported to the organization committee in a letter by the president, Mr. E. B. Everitt, and the secretary, Mrs. H. M. Snavely, on February 6.

The Wisconsin Association followed as a close second by a unanimous vote to affiliate at their southern district meeting held at Janesville on March 4. Votes will be taken at other district meetings and it is expected that all districts will vote unanimously for the State Association to affiliate.

Mrs. Henry Puppe, secretary of the Nebraska Beekeepers' Association wrote on March 16 stating they had joined the Federation.

On March 17 Mr. O. Evert Janson, secretary-treasurer of the Rhode Island Beekeepers' Association, informed the committee that that organization had voted to affiliate with the National Federation and that Mr. Brayton Eddy, of Providence, R. I., was elected a member of the Board of Directors.

On March 17, Mr. John D. Burt, secretary of the Oregon State Beekeepers' Association wrote that their organization had decided to join. A delegate has not yet been elected.

On March 29, Mrs. Thomas Davis of Sacramento, California, secretary-treasurer of the California State Beekeepers' Association, wrote that the officers of the California Association had unanimously voted to affiliate.

Letters from secretaries of the Minnesota and Montana associations indicate that they are considering favorable action, but suggesting a revision of the grouping of states in various regions.

There are no doubt good reasons for revising the regions. However, this can best be done when the Board of Managers, consisting of delegates from all affiliated states, have their first meeting. These delegates will have more information than the organization committee can possibly have on how the regions will function best, and can make arrangements to organize them as will best meet the needs of the states.

We hope that all state beekeepers' associations will take early action to affiliate, and advise a member of the organization committee to that effect.

WE HAVE LEFT A FEW two and three pound packages of bees with select untested Caucasian queens for late May delivery. Two pound size \$3.15 each. Three pound size \$4.00 each. Selected untested Caucasian queens \$1.00 each.

CAUCASIAN APIARIES, Castleberry, Alabama
Home of mountain gray Caucasian bees.

BETTER BRED QUEENS THREE-BANDED ITALIANS

Let us fill your last minute orders. Can make prompt shipment after May 15th.

	Queens	2-Lb.	3-Lb.	4-Lb.	5-Lb.
1 to 24	\$.90	\$2.95	\$3.80	\$4.60	\$5.35
25 to 99	.85	2.80	3.60	4.35	5.05
100 to 499	.80	2.65	3.40	4.10	4.75

After May 20th 15 Cents Per Unit Cheaper.

CALVERT APIARIES **CALVERT, ALABAMA**

Italian Bees 1943 and Queens

Quantity	Queens	2-Lbs.	3-Lbs.
1- 24	\$.85	\$2.80	\$3.70
25- 99	.80	2.70	3.60
100-499	.75	2.60	3.45

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A delegate to the Board of Managers should be elected at the time the decision is made, and the name submitted to the committee. As soon as a majority of states have affiliated, a meeting will be called, and officers elected. Fees should not be sent to the members of the committee, but will be payable after a regular secretary has been elected.

H. J. Rahmlow, 424 University Farm Place, Madison, Chairman Organization Committee.

— V —

Minnesota Short Course, May 13-15

A short course for beekeepers will be held at University Farm, St. Paul, May 13, 14, 15, it was announced this week by J. O. Christianson, Director of Agricultural Short Courses. Purpose of the short course is to help beginners avoid the usual mistakes and to aid experienced beekeepers in becoming more efficient in production.

Speakers at the session will include J. A. Munroe, state entomologist, North Dakota State Agricultural College, Fargo, North Dakota; F. B. Paddock, extension apiculturist, Iowa State College, Ames, Iowa; and M. C. Tanquary, J. O. Christianson, M. H. Haydak, A. G. Ruggles, and Mrs. Louise Leavitt, University Farm.

Serving on the committee arrang-

ing the short course are M. C. Tanquary, Mrs. Marian Ralston, instructor in home economics, and W. H. Alderman, Chief of the division of horticulture. Fee charge for the course is \$3.00.

— V —

Pennsylvania Acquires Amos

We have just been advised that John M. Amos, formerly with the Department of Entomology, of the University of Delaware, has been transferred to Pennsylvania State College as head of extension in beekeeping.

E. J. Anderson of this college has been holding joint position of extension apiaries and beekeeping research, and he will now be able to devote his entire time to beekeeping research, and Mr. Amos will take over the extension work.

— V —

Tazewell County (Ill.) Meeting

An open air meeting of the Tazewell County Beekeepers' Association will be held on May 9th at the Strasser home, one mile east of WMBD tower on Route No. 29. The main attraction will be the transferring of bees from logs to modern hives, for which a prize will be given.

Oliver D. Price, Pres.,
Pekin, Illinois.

WANTED!

MILLIONS OF POUNDS OF HONEY

BY H. J. HEINZ COMPANY

By selling your crop to Heinz, you can help build up the future of the honey industry and prevent a price collapse after the war!

H. J. Heinz Company, manufacturers of the famous 57 Varieties, is now in the honey business.

For the first time, honey will get the benefit of large scale national advertising—and a coast-to-coast promotional campaign by 1,500 Heinz salesmen.

The brand name used will be Lake Shore Honey, distributed by Heinz. We estimate that we will require many millions of pounds a year to meet the demand we expect to create.

Puts the Entire Industry on a Sounder Basis

You know that when sugar is scarce, honey prices go up. When sugar becomes plentiful again, honey prices go down.

One important reason is that until now there has been no major stabilizing influence. No single packer has had the means and facilities for creating and maintaining a steady demand for honey, regardless of sugar supplies. Nor has there been a packer with the manpower necessary to do a real selling job on honey. As a result, in normal times, honey is one of America's "forgotten foods."

Heinz plans to change this picture. Heinz

advertising will educate the public that honey is NOT JUST A SUGAR SUBSTITUTE—that it is a health food with all the advantages of sugar or other sweets. Mothers will be told that recent research has proved that honey is ideal for infant feeding. In its first nine months of life, the average child consumes 30 pounds of honey on a modern honey diet.

You Can Help Stabilize Honey Prices

If you agree that Heinz advertising and merchandising will be a good thing for honey—if you feel that a packer with an established quality reputation can be a stabilizing factor for the whole industry and help prevent a serious price collapse after the war—then you will undoubtedly see the wisdom of cooperating with Heinz.

You can help us build a business which will be good for your business by selling your coming crop to us.

Use the coupon below to tell us when your crop will be ready and how much you expect to produce. It is understood that sending in this coupon does not obligate you or commit you in any way.

But remember—we can help you—you can help us. Let's get together. Send in the coupon today.

—CLIP AND MAIL THIS COUPON TODAY!—

H. J. Heinz Company, Dept. AB-5, Pittsburgh, Pa.

I expect to produce _____ lbs. of honey in 1943. It will be ready about _____

Name _____

City _____

State _____

Sending in this coupon does not obligate me in any way.



CROP AND MARKET

Compiled by M. G. DADANT

For our May issue Crop and Market page, we asked our reporters to answer the following questions:

1. How much winter loss in bees?
2. Condition of bees?
3. Honey plant prospects?
4. How is the honeyflow so far?

In the New England states as a group, losses have been comparatively light, with condition of bees all the way from fair to excellent, although many bees were still in the cellars at the time of report. Honey plant prospects seem to be very good with the exception of some localities in New York where there apparently is less seeding of clovers.

In the southeastern states, losses are comparatively light. The condition of colonies has been handicapped by late frosts which damaged pollen sources in many sections. Honey plants, however, are in good condition generally. Colonies are weak and have had to be fed. No honeyflow of any importance excepting in some sections of Florida where orange and palmetto have yielded, although the weather has been unfavorable.

In the southern states, winter losses are light excepting that one reporter in Kentucky gives the loss as 25 per cent. Condition of bees is all the way from fair to weak and much feeding has had to be done. Honey plant prospects, however, seem to be very good and as late as April 15, practically no honey had been stored.

In the Indiana, Ohio, Illinois, Michigan, Wisconsin, Minnesota, and Iowa territory, the winter loss shows plainly that the short crop last year prevented bees from going into winter quarters with the necessary young bees and sufficient stores. Losses range all the way from 50 per cent downward and colonies generally are from fair to weak and most of them need feeding. While the honey plant conditions are good in this territory, there is much complaint about fields of sweet clover being plowed up for corn and soybeans. White Dutch clover, however, in this entire area seems to be in much better condition than usual due, no doubt, to the abundant rains during the summer months of 1942.

In the Missouri, Kansas, Nebraska territory, there is considerable variation with those parts of Nebraska and Kansas suffering little loss where there was a good crop last year. Honey plants are in good condition, however, although rain is needed in some sections.

In the North Dakota, Montana territory, it is yet too early to tell just what condition bees are in, although Montana reports indicate that there will be very little loss, but that honey plant conditions may suffer due to grasshopper infestation.

The Red River Valley has suffered one of the worst floods in years. Several beekeepers have lost whole apiaries.

In the intermountain states, the loss there too ranges from 5 per cent to 50 per cent, with very little loss in those states where there was a good flow last year. Wyoming especially seems to have come through in good shape with bees in excellent condition and with fair prospects where alfalfa is left standing. The production of sugar beets due to the heavy demand for sugar will have some effect no doubt.

California is already producing honey from manzanita, mustard and citrus fruit bloom. Some extracting has been done and sage and orange are beginning as per report dated April 12. Conditions throughout California generally are excellent due to plenty of rain, and honey is being picked up at ceiling prices fairly rapidly.

Taking the country as a whole, our judgment is that the loss of bees will run somewhere between 15 and 25 per cent. Bees will be slow to start because of the cold backward spring, but where they are taken care of and fed should come through O. K. Because of good rainfall generally from the Rocky Mountains eastward in 1942, honey plant conditions are excellent. The loss of bee forage due to growing of grains will undoubtedly make considerable difference in honey production. Many sections also report that the clovers have heaved due to freezing and thawing. This is true in the territory surrounding Hamilton, Illinois.

HONEY WANTED Cars and less than cars
Mail Samples
C. W. AEPPLER CO., Oconomowoo, Wisconsin

WANTED U. S. No. 1 White Honey
and other grades in 60-lb. tins. Send samples and quotations to
JEWETT & SHERMAN COMPANY
5151 Denison Ave., Cleveland, Ohio; 130 Imlay St., Brooklyn, N. Y. or 1204 W. 12th St., Kansas City, Mo.

ANDERSON'S QUALITY QUEENS

ALSO PACKAGE BEES

	Queens	2-Lb. Pkg.	3-Lb. Pkg.
1-24	\$.90 ea.	\$2.95	\$3.80
24-99	.85 ea.	2.80	3.60

For queenless packages deduct price of queen.

Write for prices on larger orders. We guarantee live delivery and perfect satisfaction. Ask your neighbor or just try 'em.

B. A. ANDERSON & CO.
OPP, ALABAMA

WESTERN CANADA BEEKEEPER

Subscription \$1.00 per year, \$1.50 two years, \$2.00 three years. In combination with American Bee Journal \$1.60 per year.

Timely topics on western Canadian bee-keeping and all the news about Canada and Canadian markets. You cannot afford to be without the most up-to-date information in these days of great changes. Sample copy free. Address **WESTERN CANADA BEEKEEPER**, Wallingford Building, Winnipeg, Manitoba, Canada.

MIDDLE TENNESSEE APIARIES

Offer leather colored Italian queens bred from my own stock which I have bred for 15 years.

90 Cents year round

JOE B. TATE & SON
1029 No. 4th St. Nashville, Tenn.

ARE YOU LOSING BEESWAX?

We render old combs, cappings and slum-gum for beekeepers. Our steam wax presses get every available ounce of wax out of this material. If you are rendering your own or having this work done elsewhere, give us a chance to show you what we can do. We specialize on SLUMGUM from presses that are not operated under water. We often get from 10 to 40 per cent wax from such material.

DADANT & SONS, Hamilton, Illinois

Package Bees & Queens

CAUCASIAN OR ITALIAN

F. E. Morrison

P. O. Box 324 Petaluma, Calif.

BUY BEE SUPPLIES

COMPLETE STOCK

R. B. DUNNING & CO.

Broad Street

BANGOR, MAINE

3-Banded Italian Bees and Queens

If you are in the market for package bees in 1943, and want the best for your money, then be wise and buy my three banded Italian bees. Write for prices.

J. P. CORONA Box 124 Kenner, La.

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Iverson Honey Company
201 North Wells St., Chicago
Reference: First National Bank of Chicago

• THE MARKET PLACE •

BEES AND QUEENS

GOLDEN QUEENS—Excellent quality, gentle, productive; health certificate. Satisfaction guaranteed 90c. O. E. Brown, Rt. 1, Asheboro, North Carolina.

CHOICE Italian Queens. Immediate shipment 75 cents. Rapides Apiaries, Winnfield, Louisiana.

DO YOU WANT the best to be had? You'll get more good queens out of a hundred from Green than you ever got before. Price 50c any number. D. P. Green, Rt. 2, Deland, Florida.

THRIFTY ITALIAN QUEENS—1 to 25, one dollar each; 25 to 50, 90c each; 50 and over cheaper. M. E. Baker, Rt. 1, Box 202, Gridley, California.

NORTHERN BREED ITALIAN QUEENS ready June first. Book orders now and reserve shipping dates. Eight dollars per dozen. Satisfaction guaranteed. Walter D. Leverette, Caro, Michigan.

FOR SALE—Package Bees, Queens and 3 and 4 frame Nuclei. Write for 1943 prices. Walker Apiaries, Lexington, Texas.

PACKAGE BEES AND QUEENS—Pure Italian. Prompt shipment, low prices and honest dealings, CRENshaw COUNTY APIARIES, RUTLEDGE, ALA.

CAUCASIAN AND CARNIOLAN BEES—2 lb. pkg. \$2.95; 3 lb. pkg. \$3.80. Untested queens 90 cents each. Safe arrival. Prompt shipment. Write for price on quantity lots. Tillery Brothers, Greenville, Alabama.

CAUCASIAN QUEENS in June 75c. Package bees now—2 lbs. \$2.80 and 3 lbs. \$3.65, with mated Caucasian queen. Deduct price of queen for queenless packages. Miller Bros. Rt. 1, Three Rivers, Texas.

CAUCASIAN PACKAGE BEES—2 lb. pkg. \$2.95; 3 lb. pkg. \$3.80; 4 lb. pkg. \$4.60. Untested queens 90 cents each. Safe arrival. Prompt shipment. Lewis & Tillery Bee Co., Greenville, Alabama.

HONEY FOR SALE

HONEY FOR SALE—We buy and sell all kinds, carloads and less. The John G. Paton Company, Inc. 630 Fifth Avenue, New York, N. Y.

HONEY FOR SALE—We buy and sell all kinds, any quantity. H. & S. Honey and Wax Company, Inc., 265-267 Greenwich St., New York.

WE BUY and sell any quantity, all varieties. B-Z-B Honey Company, Alhambra, California.

HONEY PACKERS—Write us for prices on carload lots of California and Western Honey. We stock all varieties. HAMILTON & COMPANY, 1360 Produce Street, Los Angeles, California.

FANCY WHITE CLOVER COMB honey, \$5 case; No. 1 \$4.50. In window front cartons. Good used 60's, 35c case. Extracted honey and bench metal working lathe wanted. Bizzy Bee Ranch, No. Abington, Massachusetts.

HONEY AND BEESWAX WANTED

PLEASE NOTE. While we use every precaution to list only reliable buyers in this department, we advise readers to sell honey for cash or C. O. D. unless they have thoroughly investigated the buyer as responsible on open account.

WANTED—White or light amber extracted honey from 1000 lbs. to carload. Cash waiting; send sample and best price to Honeymoon Products Co., 39 E. Henry St., River Rouge, Michigan.

Copy for this department must reach us not later than the fifteenth of each month preceding date of issue. If intended for classified department it should be so stated when advertisement is sent.

Rates of advertising in this classified department are eight cents per word, including name and address. Minimum ad, ten words.

As a measure of precaution to our readers we require reference of all new advertisers. To save time, please send the name of your bank and other reference with your copy.

Advertisers offering used equipment or bees on combs must guarantee them free from disease or state exact condition, or furnish certificate of inspection from authorized inspectors. Conditions should be stated to insure that buyer is fully informed.

WANTED—150,000 lbs. of honey or any part thereof. Send samples, and mention size of container, to Holland Honey Cake Co., Holland, Michigan.

HONEY WANTED—State kind, quality, amount. Ellsworth Meineke, Arlington Heights, Illinois.

WE PAY CASH for extracted clover honey. Fair-Field Honey Company, Millersport, Ohio.

CASH FOR YOUR WAX the day received. Write for quotations and shipping tags. Walter T. Kelley Co., Paducah, Kentucky.

WANTED—Honey and Beeswax. Mail samples, state quantity and price. Bryant & Cookinham, Los Angeles, Calif.

ALL GRADES extracted honey wanted. Bee supplies and honey containers for sale. Prairie View Honey Co., 12243 12th Street, Detroit, Michigan.

FOR SALE

FOR SALE—2 frame reversible extractor, 12 inch baskets. J. Howard Wagner, 506 Ave. H, Central City, Nebraska.

FOR SALE—One hundred colonies of bees and equipment. Bees and equipment ten frame. Frames wired and full sheets of foundation used. No disease. Geo. H. Frey, Urbana, Iowa.

DURING the present shortage of comb foundation use A. V. S. Wax Edged Wooden Starters. 50 starters for frames, \$1.00 postpaid. A. V. Small, Augusta, Kans.

IMPROVED BEEKEEPER'S HOIST saves labor; lasts indefinitely. \$20.00. Good Dairy Goat \$25.00. F. O. B. Corning, Iowa. Thee Bee Turner.

FOR SALE—37 metal queen excluders; 57 wire and wood queen excluders; 90 inner covers; 115 metal covered covers, telescope; 90 bottom boards; 385 hive bodies; 2620 drawn combs; 900 frames; 1 24-frame extractor. This is all the regular 10-frame equipment, disease free and always has been. Am too old to handle same. Fred LaRocque, Sanish, North Dakota.

FOR SALE—Used 8-frame equipment; supers with sections and starters, covers, bottoms, excluders, surplus foundation. Write for details. Dan Hoffman, Naperville, Illinois.

40 MODIFIED DADANT HIVES and some extracting supers and comb honey supers at half catalog price. A. G. Kuersten, Burlington, Iowa.

FOR SALE—Ringneck and Chinese golden pheasant eggs at reasonable prices. Maya Ranch, Meredosia, Illinois.

ONE HUNDRED NINETY 10-frame and two hundred twenty-five 8-frame queen ex-

cluders. Reasonable. Box X, American Bee Journal.

120 SHIPPING CAGES for package bees with feeders like new. Will take cash or bees or queens in exchange. A. G. Kuersten, Burlington, Iowa.

FOR SALE—50 to 75 colonies bees, 2 story hives with 2 deep extracting supers, \$12.00 each. Certificate furnished. 100 new deep supers with frames, nailed and painted, \$200.00. 100 new excluders, \$50.00. 250 lbs. Dadant Crimp-wired foundation, \$160.00. George Reints, Lindenwood, Illinois.

FOR SALE—O. A. C. strainer used one season, good condition. Price \$50.00 net, F. O. B. Baudette, Minnesota; Dadant & Sons, Hamilton, Illinois.

USED 8 FRAME equipment: supers, metal covers, bottoms, some excluders. Supers 50c each. Write for details. Pickering Bros., Savage, Montana.

LEWIS BEE SUPPLIES, Dadant's Crimp Wired Foundation. Prompt shipment from large stock. Simeon B. Beiler, Authorized Distributor, Intercourse, Pa.

WANTED

WANTED—2 or 4 frame extractor in good condition. Reversible preferred. H. C. Simmons, 412 E. Minnesota Ave., Knoxville, Tennessee.

BEES on shares in Northern Illinois. Fred Pruijm, Palatine, Illinois.

WANTED—Truckloads of ten frame hives and equipment with or without bees. L. Roose, Sac City, Iowa.

POSITIONS AND HELP WANTED

WANTED—Experienced beeman. \$135 per month. Give full particulars and references first letter. Blake Shipton, 2419 S. Lemon St., Sioux City, Iowa.

WANTED—Housekeeper for two lonely children 8 and 11 years. Modern farm, write or call. Willard Liebnow, Rt. No. 1, Troy Center, Wisconsin.

WANTED—by about June 20th experienced beeman at \$100.00 per month including room and board. State experience. Can use helper now for about 5 weeks at \$20.00 per week including room and board. Located near Milwaukee. John Kneser, Rt. 1, Hales Corners, Wisconsin.

WANTED—Man to work in bees. Must have some experience. Good future opportunity for right man. R. D. Bradshaw & Sons, Wendell, Idaho.

WANTED—Experienced man in Queen, Pack- age and Honey Production. Steady work all year. Give full particulars when replying. Al Winn, Rt. 1, Box 729A, Petaluma, Calif.

WANTED—Experienced beeman, married or single, also helper with some experience. Write full particulars including age, experience, wages. Barrett Apiaries, Howell, Michigan.

SUPPLIES

COMB FOUNDATION at money-saving prices. Wax worked at lowest rates. Comb and cappings rendered. Robinson's Wax Works, Mayville, N. Y.

LARGE CASH SAVINGS can be made by letting us work your wax into either wired or plain foundation. Large independent factory manufacturing a complete line of bee supplies including extractors, etc. Selling direct saves you the agents profit. Quick shipment from large stock. Large free catalogue explains everything. Walter T. Kelley Co., Paducah, Kentucky.

FIVE POUNDS quality medium brood foundation postpaid for \$3.80. Fred Peterson, Alden, Iowa.

SUPPLIES (Continued)

PINARD'S nailless queen cage. Agents—Diamond Match Co., Chico and Los Angeles, California; Weaver Apiaries, Navasota, Texas. Pinard manufacturer, 1794 Hicks Ave., San Jose, California.

WRITE FOR CATALOGUE. Quality bee supplies at factory store prices. Prompt shipment. Satisfaction guaranteed. The Hubbard Apiaries, Manufacturers of Bee Supplies, Onsted, Michigan.

FOR SALE—Our COMBINED CONTROL-LABLE FEEDER and SWARM CONTROL BOARD when used right will save many a swarm. Has no metal to chill bees. Better made. \$1.75 postpaid for sample. 10 for \$15.00 not prepaid. Upon immediate receipt, if unsatisfactory, the purchase price refunded. Lewis-Dadant dealer, NICOLLET COUNTY NURSERY, St. Peter, Minnesota.

PORTER BEE ESCAPES are fast, reliable, labor savers. R & E. C. Porter, Lewistown, Illinois.

MISCELLANEOUS

DIFFERENT, that's all. Written and published for the instruction of beekeepers. 52 pages of breezy, entertaining beekeeping comment each month. One year, \$1.00; two years, \$1.50. Sample, 3c stamp. Beekeepers Item, San Antonio, Texas.

FOR SALE—6 Am. Basswood seedlings 18 inch, or 6 Marrowii Honeysuckle or 5 Pink Honeysuckle shrubs 18 inch, or 2 pussy willows, or 3 Basswood transplants 3 foot, postpaid for a dollar bill. Nectar and pollen producing. Lewis-Dadant dealer—NICOLLET COUNTY NURSERY, St. Peter, Minn.

GET your drawings and construction detail NOW for proven tried BRADSHAW DEMOUNTABLE UNCAPPING PRESS. No more headaches, simple to build your self. Won't rust out, last lifetime. Producers report it greatest improvement in fifty years. No heat required, will not darken honey. Adaptable any size outfit. Send \$2.00 today for PLANS to Bradshaw & Sons, Wendell, Idaho.

SUBSCRIBE for Honey Cookery News—bi-monthly 35 cents. 3414 S. Western Ave., Chicago, Illinois.

RANCH MAGAZINE—Do you find it difficult to secure information about sheep and sheep ranching methods? The SHEEP AND GOAT RAISER reaches more sheepmen with more information on range sheep than any magazine published. Subscription \$1.50. Hotel Cactus, San Angelo, Texas.

THE BEEKEEPERS MAGAZINE, published monthly, brings you the news from the field of beekeeping. Subscription: \$1 a year. Single copy of current issue, 10c. The Beekeepers Magazine, 3110 Piper Road, Lansing, Michigan.

THE BEE WORLD—The leading bee journal in Great Britain and the only international bee review in existence. Specializes in the world's news in both science and practice of apiculture. Specimen copy, post free, 12 cents, stamps. Membership of the Club, including subscription to the paper 10/6. The Apis Club, The Way's End, Foxton Royton, Herts, England.

U.S.D.A. FARM FLASHES

The United States Department of Agriculture, in its broadcast releases to the entire radio system of the country, now puts out frequent news about beekeeping, urging farmers and beekeepers to cooperate in pollination giving items about supplies, deferment, beeswax needs, and other pertinent facts of public and industrial interest. If you listen to the farm news you may hear these items over your radio. No doubt about it, bees have the green light.

PACKAGE BEES AND QUEENS

Gentle three band Italian stock that have stood the test for 20 years, and made me a host of friends. They will do as much for you. In addition to above strain, I will be able to produce a limited number of packages headed with daughters of queen bred for resistance to A. F. B.

As I have never had any disease in my bees I cannot attest to their resistance to A. F. B. but am breeding from daughters of queens bred for resistance. They are a bit harder to handle than Italians, but from a honey making standpoint I don't think they can be excelled.

No orders solicited before May 20th. After May 20th priced as follows:

Queens	2-Lb.	3-Lb.	4-Lb.	5-Lb.	
1- 24	\$.75	\$2.80	\$3.65	\$4.45	\$5.20
25- 99	.70	2.65	3.45	4.20	4.90
100-499	.65	2.50	3.25	3.95	4.60
500-up	.60	2.35	3.05	3.70	4.30

A. E. SHAW, Shannon, Mississippi

WE WILL BUY YOUR "CHUNK HONEY" IN THE SUPERS. . . . WRITE US TODAY
THE FRED. W. MUTH CO. Pearl and Walnut Cincinnati, Ohio



COMPLETE LINE

Hives, supers, frames, sections, and foundation. Also a limited supply of critical and restricted items. Send us a list of your requirements and we will quote. Or send us your orders and we will fill them to the best of our ability.

A. H. RUSCH & SON CO.
REEDSVILLE, WISCONSIN

PACKAGE BEES :: QUEENS

THREE-BANDED ITALIANS

GOOD STOCK, GOOD SERVICE AND GOOD WEIGHT IS THE FOUNDATION OF OUR BUSINESS.

Express	Collect	Queens	2-Lb.	3-Lb.	4-Lb.	5-Lb.
1- 24	-----	\$.90	\$2.95	\$3.80	\$4.60	\$5.35
25- 99	-----	.85	2.80	3.60	4.35	5.05
100-499	-----	.80	2.65	3.40	4.10	4.75

If queenless packages are desired, deduct price of queen. Queens—Three-Banded Italians or daughters of stock bred for resistance. No charge for clipping. Tested Queens, \$1.50 each. Parcel Post packages add 20 cents each for special handling plus regular postage.

Citronelle Bee Co. :: Citronelle, Ala.

IMPERIAL ITALIAN BEES AND QUEENS

A few open dates for package bees after May 20th. A few more bookings for queens will also be accepted. Prices: 2-lb. packages with untested queen at \$2.60; 3-lb. packages with untested queen at \$3.50. Untested Italian queens at 90 cents; Caucasian queens, mating not guaranteed, 95 cents each. No discounts. Quality and delivery when promised our motto.

THE COFFEY APIARIES

WHITSETT, TEXAS

WE ARE BUYERS OF...

BEESWAX ROBINSON WAGNER CO. INC.
110 E. 42nd ST. NEW YORK CITY

FINE ITALIAN STOCK

2-Lb. package with queen \$2.95; 3-Lb., \$3.85

E. J. BORDELON APIARIES

Box 33, Moreauville, Louisiana

To assure yourself of obtaining the best of supplies, read the ads of A-B-J—when writing to them, mention A-B-J

PACKAGE BEES—ITALIAN QUEENS

Light, 3-Banded Italians reared from queens tested for heavy honey producing. Long life, good winter resistant and gentle. Stock I have been breeding from since 1926 and have made me continuous good customers. Can also furnish queens reared from stock bred for resistance to disease.

I have given them a good trial the past two years and they are good honey producers—a little harder to handle than my old stock.

Queens of either stock	\$.75
Bees, 2-Lb.	2.80
Bees, 3-Lb.	3.65
Per extra lb.	.80

HOMER W. RICHARD

Route 3, Box 252-1

El Dorado, Arkansas

We are booked to capacity.

Please keep us in mind for 1944.

ALBERT KOEHNEN, Live Oak, Calif.

PACKAGE BEES . . . Italians . . . Queens

Many days in May are booked up, but some dates still available. Late packages with our GOOD queens will make a profitable crop.

Quantity	Queens	2-Lb. Pkgs.	3-Lb. Pkgs.
1-24	\$.90	\$2.95	\$3.80
25-99	.85	2.80	3.60
100-up	.80	2.65	3.40

BESSONET BEE COMPANY, Donaldsonville, La.

PACKAGE BEES

Our greatest asset is the good will of our customers and we sincerely value the business you have given us. It is our aim always to give service that will merit your trust and confidence. Prices with crates returned to us, we pay return express.

	2-Lb.	3-Lb.	4-Lb.	5-Lb.
1 to 24	\$2.75	\$3.35	\$4.00	\$4.60
25 to 49	2.60	3.20	3.85	4.45
50 or over	2.45	3.05	3.70	4.30

NEAL'S APIARIES : LETTSWORTH, LA.

ST. ROMAIN'S "HONEY GIRL" ITALIANS

We did not over book. Except for a few days delay at the start due to difficulty of getting out queens caused by severe and continued cold in March, we will ship all orders on dates promised. We will have a large supply of package bees and queens throughout the month of May and June.

Prices include a young queen, daughters of line-bred pedigree breeders

	3-Lb.	4-Lb.
1 to 3 packages	\$3.90 each	\$4.70 each
4 to 9 packages	3.75 each	4.55 each
10 or more packages	3.60 each	4.40 each

Queens alone \$1.00 each. Live delivery. Certificate of inspection, certifying freedom from disease with each shipment.

St. Romain's "Honey Girl" Apiaries, Moreauville, La.



FOR BETTER BEEKEEPING

DADANT'S FOUNDATION

FIRST CHOICE OF EXPERT BEEKEEPERS

Package Bees & Queens

THREE-BANDED ITALIANS

For quality and prompt service.
3 lbs. package with queen at \$3.80
2 lbs. package with queen at 2.95
Extra queens at .90
We specialize in queens. 20 yrs. in bees

Dupuis Apiaries Andre Dupuis, Prop.
Breaux Bridge, La.

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Keeping
Up?

...with the latest developments in your field? Here's a group of magazines that specialize in a particular subject! You'll be interested in at least one of these magazines... and you have the assurance that the articles are written by people who know. Send in your subscriptions today!

Bee Magazines

Gleanings in Bee Culture, per yr. \$1.00
Beekeepers Item 1.00
American Bee Journal 1.00

Farming

The Country Book, quarterly 1.00
American Farm Youth .75
Fletcher's Farming .50

Goats

American Dairy Goat News 1.00
Goat World 2.00

Livestock

The Cattleman 1.00
American Cattle Producers 1.00
Florida Cattleman 1.00
National Live Stock Producer .50
Texas Live Stock Journal 1.00
Hog Breeder (all breeds) 1.00
Eastern Breeders, 2.00 (8 months 1.00)
American Hamp. (hog) Herdsman 1.00
Sheep (and Karakul) Breeder 1.00
The Sheepman 1.00

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Combless Packages and Queens

THREE-BANDED ITALIANS
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Write for prices and open shipping dates.

THRIFTY bees are guaranteed to please.

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Breeders Since 1892



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Comb and strained honey. We pay highest market prices.

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Daughters of stock bred for resistance

QUEENS

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PRICES ON PACKAGE BEES WITH QUEENS TO MAY 21ST, 1943

	2-Lb.	3-Lb.	4-Lb.	5-Lb.
Queens	Bees	Bees	Bees	Bees
1 to 24	\$.90	\$2.95	\$3.80	\$4.60
25 to 99		.85	2.80	3.60
100 to 499		.80	2.65	3.40
500 up		.75	2.50	3.20
				3.85
				4.65

For tested queens double the price of untested.

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Over 25 years' experience shipping. Paying 43 1/4 cents a pound f. o. b. your station for Beeswax in exchange for bees and queens, if you have over 50 pounds write for shipping instructions. Truckers HEADQUARTERS, drive in 3 1/2 miles south of Weslaco on Progresso Highway.

Blue Bonnet Apiaries, Rt. 1, Box 70, Mercedes, Texas



Fast Service and Results

At Picayune, bees and queens are raised under natural conditions. Prolific, gentle, honey producing stock, managed under a moderate honeyflow, starting about March first and continuing through the breeding season.

Our breeding stock has been chosen for prolificness, high production, gentleness, and appearance. Four express and mail trains daily; 4 percent extra queens with each package shipment.

We have followed our usual booking procedure, that is, we have accepted bookings for 40% of our average capacity prior to the first of April. Then when we actually start shipping, as we go along we will accept as many more orders as we are certain we can fill. At this writing, it is quite certain that we will have seventy-five to one hundred percent higher production than our earlier conservative estimate. We are as yet booked quite light for packages after 15th of May and queens after the 25th of May and we will undoubtedly be able to accept a good many more orders prior to those dates.

Quantity	2-Lb.	3-Lb.	4-Lb.	5-Lb.	Queens
1-24	\$2.95	\$3.85	\$4.75	\$5.60	\$.95
24 up	2.80	3.65	4.50	5.30	.90

15% booking deposit required

Daniels Apiaries : Picayune, Miss.

Send your cappings and old comb to MUTH for rendering into beeswax. . .
FRED. W. MUTH CO. Pearl and Walnut Cincinnati, Ohio

Stock From Government, Bred for Resistant Queens

We might still have package bees at the following prices, get in touch with us for your supply of young select untested laying queens. No C. O. D.

Combless. With Queen	2-Lb.	3-Lb.	4 Lb.
1 to 24, each	\$2.90	\$3.65	\$4.40
25 to 49, each	2.75	3.50	4.25
50 or more, each	2.55	3.30	4.00

Queens each \$.80.

Air mail \$.85

PLAUCHE BEE FARM

Hamburg, Louisiana

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THE POSTSCRIPT

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Carloads and less than carloads.
Mail sample and best prices in all
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C. W. AEPPLER COMPANY
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Package Bees and Queens
For Quality and Service
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UNITED STATES
WAR
BONDS
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"HONEY WANTED" Car Loads and Less—
All Grades.
SEND SAMPLES AND PRICES
Honey Sales Co., 1808 N. Washington Ave.
MINNEAPOLIS, MINNESOTA

Queens Queens

Italian Bees and Queens from
government stock bred for resistance
to disease, with health certificate,
and live delivery guaranteed.

Combless	2-Lb.	3-Lb.
1 to 24, each	\$2.70	\$3.50
25 to 49, each	2.55	3.35
50 or more	2.45	3.25

Queens untested ea. 80c. Air Mail 85c

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"FROM THE DEEP SOUTH"
ITALIAN BEES AND QUEENS

2-Lb. Pkg. with Queen	\$2.95
3-Lb. Pkg. with Queen	3.80
Queens, each	.90

J. D. FRANKLIN
2815 Comus Court, New Orleans, La.

Buy a War Bond Today!

The Iowa "West Union Argus-Gazette" of February 24 and 25 devotes much space to an account of the president of the Iowa Beekeepers' Association, George P. Schatz completed fifty years as a clothing merchant in that city on March first. In addition to his clothing store Schatz operates a number of apiaries and produces honey on a considerable scale. Prior to his election as President of the association he headed the committee on fairs and expositions and has himself been a successful exhibitor at the state fair.

— V —

Fred H. May, of Meredosia, Illinois, tells of boys finding a swarm of bees with about 20 pounds of honey in their rabbit trap when they wanted to use it last November. Rather unexpected game to catch in a rabbit trap.

On one occasion bees occupied one of my bird houses and filled it with honey. Such incidents remind one that a few decoy hives are useful for catching stray swarms.

— V —

A jar of honey has come to me that is said to come from carrot. It is dark in color and of a strong and disagreeable flavor. This is far different from the "White honey, with characteristic flavor" described by Richter in his bulletin on honey plants of California. Since carrots are grown to considerable extent for seed in California some of our readers must be familiar with the honey harvested from this source. We will greatly appreciate information on this point and are anxious to know whether the honey from carrot is white or whether it is very dark and strong as the recent sample indicates. This sample reminds me of honey that I have tasted which was reported as having come from eucalyptus. Vansell in his bulletin describes carrot honey as light amber in color. Who knows for sure?

— V —

An inquiry comes to me from the West as to how to get all the wax from old combs. The answer must be that ordinary rendering equipment will not get all the wax. It requires a heavy press operating under steam to separate all the wax. In dozens of cases profitable amounts of wax have been recovered from the slumgum after the beekeepers had extracted all that their equipment would recover. It seems probable that taking the nation as a whole that at least one-fourth of the wax is wasted in rendering.

— V —

The Connecticut Agricultural Experiment Station at New Haven has issued a bulletin, "Herbs and Their Culture," which will be of interest to many of our readers. The bulletin calls attention to the fact that several of the culinary herbs are also good honey plants.

Reports indicate that the butter supply is very short in certain areas and some are unable to buy it in the stores. Several have suggested that peanut butter and honey make a spread that serves as a substitute.

— V —

Speaking of post offices, there is a Honeybee in Kentucky, Honey Bend in Illinois, Honey Brook in Pennsylvania, Honey Camp in Virginia, and Honey Creek in each of Iowa, Indiana, and Wisconsin. There is also a Honeycutt in North Carolina, Honeydew in California, Honeyford in North Dakota and a Honey Grove in each of Pennsylvania and Texas. To complete the story there is Honeyhill in South Dakota, Honey Island in Texas, and Honeyville in Utah. It is doubtful whether any other industry is so well served in the naming of localities as is the case with bees and honey.

— V —

Peter Legoux, French patriot who fled to this country in 1786, was a scientist who became seriously interested in bees. He was a friend of Dr. Franklin and General Washington as well as Thomas Jefferson. He established a large apiary on his Spring Garden Farm near Philadelphia where every colony was given its own name.

His personal account of his experiences with bees have apparently never been published, although the manuscript is now in the hands of The American Autograph Shop, Merion Station, Pennsylvania. Included in the manuscript is a story of a visit of General Washington to his establishment.

— V —

Perhaps this item might be secured for one of the beekeeping libraries and reprints made to defray its cost. Surely the story of the first American to undertake such a venture should be preserved, especially in view of the many famous Americans who were his guests. No other American writer on bees appears to have been associated with so many who were high in positions of national prominence or to have attracted the interest of so wide a group of famous men.

— V —

We are very happy here on the arrival of little Andrew, the newest member of the Dadant family. His daddy is Robert; "Bob" to you. His granddad is Maurice. This latest arrival is of the fifth generation of the Dadant line in America, the great-great grandson of Charles Dadant who came to Illinois in 1863, to engage in beekeeping and grape growing near the Mississippi River. Except for four young men in the armed forces, all the men of the family are engaged in affairs connected with the business of beekeeping. Here is hoping that the newcomer of the fifth generation will continue to carry on. Well might this group adopt the bee as a family emblem.

FRANK C. PELLETT.

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Save Worry!

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Can be nailed into Lewis Slotted Bottombar
Frames in a jiffy. And such wonderful
combs you'll be proud of 'em.

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We are manufacturers of beekeepers
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finish and workmanship.

Due to war conditions we did not print a
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Try us on your list of things wanted. We will do
the best possible with it.

We want honey and beeswax. Will be glad to
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Chicago, Ill.

Package Bees and Queens

Order our Italian Bees and Queens and
get the best. Prices for young laying queen
and package bees with queen as follows:

Quantity	Queens	2-Lb.	3-Lb.	4-Lb.	5-Lb.
1 to 20	\$.90	\$2.95	\$3.80	\$4.60	\$5.35
21 to 49	.85	2.75	3.55	4.30	5.00
50 to 100	.80	2.60	3.35	4.05	4.70
100 up	.75	2.50	3.20	3.85	4.45

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Three-ply foundation is the most economical foundation to use. **Two three-ply brood combs will contain as much worker brood comb as three ordinary combs.** A saving in producing wax which means the bees will have more time to pollinate the increased acreage in clover, the thousands of new producing fruit trees, etc.

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